PACIFIC SALMON COMMISSION
JOINT TRANSBOUNDARY TECHNICAL COMMITTEE

ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT AND A REVIEW OF JOINT ENHANCEMENT ACTIVITIES IN 2011

REPORT TCTR (15)-3

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ACRONYMS

ADF&G	Alaska Department of Fish and Game
AC	Allowable Catch
AF	Aboriginal Fishery
BLC	Base Level Catch
CAFN	Champagne Aishihik First Nation
CCPH	Cumulative Catch per Hour
CPUE	Catch per unit effort
CWT	Coded Wire Tag
DFO	Department of Fisheries and Oceans (Canada)
DIPAC	Douglas Island Pink and Chum (Private Hatchery)
ESSR	Excess Salmon to Spawning Requirement (surplus fishery license)
GSI	Genetic Stock Identification
IHN	Infectious Hematopoietic Necrosis (a virus which infects sockeye salmon)
LCM	Latent Class Model
MEF	Mid Eye Fork (fish length measurement)
MR	Mark–Recapture
MSY	Maximum Sustained Yield
POH	Post-Orbital-Hyperal (fish length measurement)
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
SCMM	Stikine Chinook Management Model
SHA	Special Harvest Area
SMM	Stikine Management Model
SPA	Scale Pattern Analysis
SW	Statistical Week
TAC	Total Allowable Catch
TMR	Thermal Mark Recovery
TRTFN	Taku River Tlingit First Nation
TBR	Transboundary River
TTC	Transboundary Technical Committee
YSC	Yukon Salmon Committee

CALENDAR OF STATISTICAL WEEKS

	Date			Date	
SW	Begin	End	SW	Begin	End
1	1-Jan	1-Jan	28	3-Jul	9-Jul
2	2-Jan	8-Jan	29	10-Jul	16-Jul
3	9-Jan	15-Jan	30	17-Jul	23-Jul
4	16-Jan	22-Jan	31	24-Jul	30-Jul
5	23-Jan	29-Jan	32	31-Jul	6-Aug
6	30-Jan	5-Feb	33	7-Aug	13-Aug
7	6-Feb	12-Feb	34	14-Aug	20-Aug
8	13-Feb	19-Feb	35	21-Aug	27-Aug
9	20-Feb	26-Feb	36	28-Aug	3-Sep
10	27-Feb	5-Mar	37	4-Sep	10-Sep
11	6-Mar	12-Mar	38	11-Sep	17-Sep
12	13-Mar	19-Mar	39	18-Sep	24-Sep
13	20-Mar	26-Mar	40	25-Sep	1-Oct
14	27-Mar	2-Apr	41	2-Oct	8-Oct
15	3-Apr	9-Apr	42	9-Oct	15-Oct
16	10-Apr	16-Apr	43	16-Oct	22-Oct
17	17-Apr	23-Apr	44	23-Oct	29-Oct
18	24-Apr	30-Apr	45	30-Oct	5-Nov
19	1-May	7-May	46	6-Nov	12-Nov
20	8-May	14-May	47	13-Nov	19-Nov
21	15-May	21-May	48	20-Nov	26-Nov
22	22-May	28-May	49	27-Nov	3-Dec
23	29-May	4-Jun	50	4-Dec	10-Dec
24	5-Jun	11-Jun	51	11-Dec	17-Dec
25	12-Jun	18-Jun	52	18-Dec	24-Dec
26	19-Jun	25-Jun	53	25-Dec	31-Dec
27	26-Jun	2-Jul			

EXECUTIVE SUMMARY

Final estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers for 2011 are presented and compared with historical patterns. Average, unless defined otherwise, refers to the most recent 10-year average (2001–2010). Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Preliminary results from TBR sockeye salmon, *Oncorhynchus nerka*, enhancement projects are also reviewed.

Stikine River

The 2011 Stikine River sockeye salmon terminal run estimate was 213,400 fish, of which approximately 135,800 fish were harvested in various fisheries including test fisheries. An estimated 77,600 Stikine River fish escaped to spawn, including 14,000 fish that migrated to the Tuya River block that were not harvested. The Tahltan Lake sockeye salmon escapement of 35,000 was above the escapement goal range (18,000 to 30,000 fish). The estimated U.S. commercial harvest of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 74,000 fish. The Canadian inriver commercial fishery harvest was 48,600 and Aboriginal fishery harvest was 6,900 fish. The inriver test fishery harvested 3,100 sockeye salmon and there was no marine test fishery for sockeye salmon in 2011. Weekly inseason run projections from the SMM ranged from 160,000 to 183,000 sockeye salmon; the final inseason model prediction was 162,000 fish, with a TAC of 98,000 fish. Weekly inseason run projections using other methods ranged from 158,000 to 200,000 sockeye salmon; the final inseason predictions from other methods was 200,000 with a TAC of 136,000 fish. Based on final postseason run size estimate 213,400 and TAC calculations of 72,800 Stikine River fish for each country, Canada harvested 76% and the U.S. harvested 101% of their respective TACs. Broodstock collection removed 4,600 fish and otolith sampling removed 340 fish from the escapement to Tahltan Lake leaving a spawning escapement of 29,700 fish. The estimated spawning escapement of 29,400 mainstem Stikine River sockeye salmon was within the escapement goal range of 20,000 to 40,000 fish for this stock group.

The 2011 Stikine River large Chinook salmon final terminal run estimate was at 19,800 fish, of which approximately 5,300 fish were harvested in various fisheries. An estimated 14,500 Stikine River fish escaped to spawn; below the escapement point goal of 17,400 Chinook salmon, but within the escapement goal range of 14,000 to 28,000 fish. The terminal run and harvest were both below average. The Little Tahltan River large Chinook salmon escapement of 1,750 fish was below the Canadian escapement target of 3,300 fish and below the lower bound of the Canadian target range of 2,700 to 5,300 fish. The estimated U.S. commercial harvest of Stikine River large Chinook salmon in Districts 108 gillnet, test, troll, subsistence, and sport fisheries was 2,200 fish; based on postseason GSI. The estimated Canadian commercial, aboriginal, assessment/test, and sport fisheries harvest was 3,200 fish. Managers used the MR, model, and other assessment estimates to generate inseason run sizes after SW 32. The inseason run

projections were persistent throughout the course of the fishery in predicting a terminal run size that was less than the preseason forecast of 30,000 fish. Weekly inseason run projections ranged from 18,300 to 22,700 Chinook salmon. The final postseason estimate run size estimate of 19,800 large Chinook salmon indicated only base level and assessment/test fishery harvests were permitted.

The 2011 run size of Stikine River coho salmon cannot be quantified. The U.S. terminal harvest of Stikine River coho salmon is also unknown since there is no stock identification program for this species. Mixed stock coho salmon harvest in District 106 was 118,000 fish (50% Alaska hatchery) and District 108 harvest was 18,600 fish (11% Alaska hatchery) and both were below average. The Canadian inriver coho salmon harvest of 5,800 fish was well above average. The aerial survey count of 2,500 fish from six index sites combined was below average. The cumulative CPUE observed in the coho test fishery was also below average.

Taku River

The final postseason estimate of the 2011 Taku River sockeye salmon terminal run was 211,700 fish; 201,900 wild fish and 9,900 enhanced fish. The U.S. harvested 66,100 wild fish and Canada harvested 22,300 wild fish and the estimated above border spawning escapement was 113,000 wild fish. The terminal run size was average; however, the escapement was above the escapement goal range of 71,000 to 80,000 fish. The U.S. harvested an estimated 66% of the U.S. AC and Canada harvested an estimated 84% of the Canadian AC.

The harvest of large Chinook salmon in the Canadian commercial fishery in the Taku River was 2,342 fish. The Canadian Aboriginal fishery in the Taku River harvested 150 large Chinook salmon. The District 111 traditional drift gillnet fishery harvested 518 large Taku River Chinook salmon. The estimate for large Taku River Chinook salmon escapement was 27,523 fish, while the inriver and terminal run estimates were 30,800 and 31,939 fish, respectively.

The estimated above border run of Taku River coho salmon in 2011 is 83,400 fish, which is below average. The Canadian inriver commercial and test fishery harvest was 12,500 coho salmon. After Canadian harvests are subtracted from the above border run, the above border-spawning escapement is estimated at 70,900 coho salmon, which exceeds the minimum above border inriver run of 38,000 fish. The U.S. harvest was 27,600 coho salmon in the District 111 traditional fishery. Alaskan hatcheries contributed an estimated 2,100 fish or 8% of the District 111 harvest.

Alsek River

The Alsek River sockeye salmon harvest of 24,200 fish in the U.S. commercial fishery was above average. The Canadian inriver harvest was 600 sockeye salmon for Klukshu River and 2,100 fish aboriginal harvest with harvests not reported for Village Creek. The Klukshu River weir count of 21,400 sockeye salmon was above average and above the escapement goal range of 7,500 to 15,000 fish. The count of 5,600 early run sockeye salmon (count through August 15) and the late run count of 15,800 were both above average.

The U.S. Dry Bay harvest of 550 large Chinook salmon was average. The Canadian recreational fishery harvest of 100 fish and aboriginal harvest of 120 were both average. The 1,670 Chinook salmon counted through the Klukshu River weir was average and within the escapement goal range of 1,100 to 2,300 Chinook salmon.

Current stock assessment programs prevent an accurate comparison of the Alsek River coho salmon run with historical runs. The U.S. Dry Bay harvest was 1,600 coho salmon and the Canadian inriver aboriginal fishery harvest was 30 fish. The count through the Klukshu weir was 2,100 coho salmon but counts of coho through this weir do not provide a complete enumeration or consistent index since the weir is removed before the run is over and dates of removal are not standardized.

Enhancement

Eggs and milt were collected from the year 2011 sockeye salmon escapements at Tahltan and Tatsamenie lakes. A total of 6.5 million eggs were collected at Tahltan Lake and 2.2 million at Tatsamenie Lake. Fecundities were higher than expected at the two lakes resulting in more eggs than expected based on the number of females.

Outplants of 2010 brood year sockeye salmon fry in May and June 2011 were as follows: 1.235 million fry into Tahltan Lake; 1.245 million fry into Tuya Lake; and 1.6 million fry into Tatsamenie Lake. Green-egg to stocked-fry survivals were 40%, 44%, and 84% for the Tahltan, Tuya, and Tatsamenie, respectively. Survivals were lower for the Tahltan Lake stock due to loss of 11 of 25 incubators due to IHN. Numerically 43% of the eggs collected were lost due to IHN.

The IHN losses were the highest in the programs history; however the cumulative losses since 1989 are consistent with the history of sockeye salmon culture in Alaska. The enhancement subcommittee will be continuing to assess these losses and any future ones with regard to any changes in techniques that may be necessary to safeguard against this pathogen.

The egg incubation and thermal marking program was continued at Snettisham Hatchery in 2010 and 2011. Snettisham hatchery is operated by DIPAC, a private aquaculture organization in Juneau. A cooperative agreement between ADFG and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Adult sockeye salmon otoliths were processed inseason by the ADFG otolith lab to estimate the weekly contribution of fish from U.S./Canada TBR fry stocking programs to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku rivers. Contribution estimates of stocked fish to Alaskan harvest were 35,000 stocked Stikine River fish to District 106 and 108, and 5,600 stocked Taku River fish to District 111. Contribution estimates of Canadian fisheries included 26,100 stocked fish to Stikine River fisheries and 1,800 stocked fish to the Taku River fisheries.

INTRODUCTION

This report presents final estimates of the 2011 harvest and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek rivers and describes management actions taken during the season. Harvest and effort data are presented by week, for each river for both U.S. and Canadian fisheries. Spawning escapement data for most species are reported from weir counts or other escapement monitoring techniques. Joint enhancement activities on the Stikine and Taku rivers are also summarized.

The TTC met prior to the season to update joint management, stock assessment and enhancement plans and determine preseason forecasts and outlooks for run strengths and initial TAC estimates for the various species and rivers. The results of this meeting are summarized in: PSC TTC, TCTR (11)-1 Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek rivers, 2011.

Run reconstruction analyses are conducted on the sockeye salmon, *Oncorhynchus nerka,* and Chinook salmon, *O. tshawytscha,* runs to the Stikine and Taku rivers and to the Taku River for coho salmon, *O. kisutch,* for the purpose of evaluating the stocks and the fisheries managed for these stocks. No estimates of marine harvest are made for Alaskan fisheries outside of District 106 and 108 for Stikine River stocks, District 111 for Taku River stocks and Subdistrict 182-30 & 31 for Alsek River stocks.

STIKINE RIVER

Stikine River salmon are harvested by U.S. commercial gillnet and troll fisheries as well as recreational and subsistence fisheries in Alaskan Districts 106 and 108, by Canadian commercial gillnet and test fisheries located in the lower and upper Stikine River, and by a Canadian AF in the upper portion of the river (Figure 1). In addition, Canadian terminal area fisheries are occasionally operated in the lower Tuya River and/or at Tahltan Lake when escapements are estimated to include excess salmon to spawning requirements (ESSR). A recreational fishery also exists in the Canadian sections of the Stikine River drainage. In 1995, a United States personal use fishery was established in the lower Stikine River; no catches were reported in this fishery in 1995 through 2000. Approximately 30 sockeye salmon were harvested in 2001, and the personal use fishery on the Stikine River was not open in 2002 and 2003. A U.S. subsistence fishery was opened in 2004 for sockeye salmon and in 2005 for Chinook and coho salmon. Additional catches of unknown quantity are taken in U.S. troll, gillnet, seine, and sport fisheries in locations beyond Districts 106 and 108.

In 1993, the U.S. spring experimental troll fishery near Wrangell was expanded to include two new areas in portions of District 106 and 108 to target hatchery Chinook salmon. In 1998 an additional area was included in a portion of District 108. The three areas in District 108 and one area in District 6 have remained unchanged and have opened in the absence of District 108 directed Stikine River Chinook salmon fisheries.

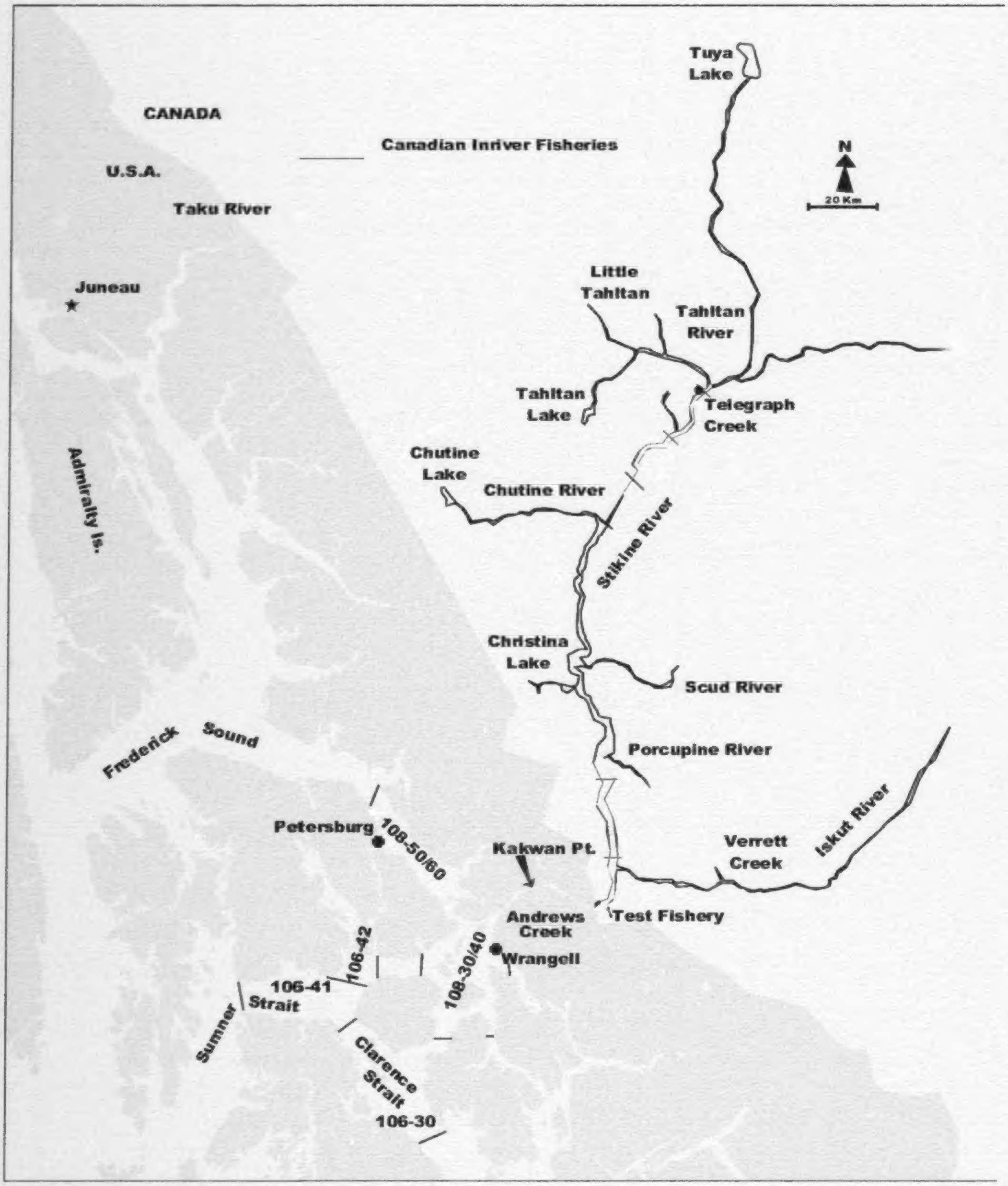
Tuya Lake
CANADA
Canadian Inriver Fisheries
U.S.A.
N
20 Km
Taku River
Juneau
Little Tahltan
Tahltan River
Tahltan Lake
Telegraph Creek
Chutine Lake
Chutine River
Admiralty Is.
Stikine River
Christina Lake
Scud River
Frederick Sound
Porcupine River
Petersburg
108-50/60
Kakwan Pt.
Verrett Creek
Iskut River
Andrews Creek
Test Fishery
106-42
108-30/40
Wrangell
106-41
Strait
Sumner
Clarence Strait
106-30

Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

Harvest Regulations and the Joint Management Model

Fishing arrangements in place for salmon originating from the Canadian portion of the Stikine River watershed are provided in Annex IV, Chapter 1 of the PST and can be found at: http://www.psc.org/pubs/treaty.pdf. These arrangements include: directed fisheries for Chinook salmon; continuation of a U.S. subsistence fishery on Chinook, sockeye, and coho salmon stocks within the U.S. section of the Stikine River; continuation of coho salmon harvest shares; and, a sockeye salmon harvest sharing arrangement based on the presumed production of enhanced fish.

As in most previous years, the TTC met prior to the season to update joint management and enhancement plans, develop run forecasts, and determine new parameters for input into the inseason Chinook and sockeye salmon run projection models. The Chinook salmon model is referred to as the SCMM and served as a key management tool governing weekly fishing regimes for Stikine River Chinook salmon. The SCMM, however, was complemented inseason with a concurrent MR study and other inriver assessment methods. The sockeye salmon model is referred to as the SMM. The SMM was complemented inseason with concurrent inriver run size estimates based on fishery performance against historical fishery performance and run size estimates.

Chinook Salmon

The SCMM model is based on the linear regression (correlation) between weekly cumulative CPUE of large Chinook salmon at the tagging site, located near the mouth of the Stikine River, and terminal run size based on MR studies conducted in 1996–2010. Most of the CPUE and run size data sets (CPUE vs. run size) are significantly correlated. Inseason model estimates were available commencing in SW 23 (Table 1). MR estimates based on the cumulative ratio of tagged-to-untagged fish observed in the inriver commercial fishery were also generated commencing in SW 23. In order to honor Annex IV, Chapter1, Paragraph 3(a)(3)(vii), which obliges the Parties to apportion their overall TAC by historical weekly run timing, weekly fishery openings were announced based on weekly guideline harvests.

The preseason run size estimate of 30,000 large Chinook salmon was above the threshold run size limit of 28,100 fish. The threshold number is the sum of the midpoint escapement goal (21,000) + the Canadian BLC (2,300) + the U.S. BLC (3,400) + the inriver assessment/test fishery harvest (1,400). Both countries are permitted to harvest their BLC taken in the course of the targeted sockeye salmon fisheries for run sizes forecasted to be below 28,100 fish. Further, Canada is permitted to prosecute an assessment/test fishery so designed to provide inseason run estimates while harvesting a maximum of 1,400 large Chinook salmon.

Table 1. Stikine River large Chinook salmon run size based on a model, mark–recapture estimates, other methods, and weekly inseason harvest estimates from the District 108 gillnet, sport, and troll fisheries and the Canadian gillnet, assessment/test, and sport fisheries, 2011.

	Start	Terminal Run		TAC		Estimated Harvest	
SW	Date	Estimate	Method	Total	Weekly	Weekly	Cumulative
Canada Estimates[a]							
19	01-May	30,000	Preseason	4,010	53		
20	08-May	30,000	Preseason	4,010	153	107	107
21	15-May	30,000	Preseason	4,010	184	174	281
22	22-May	30,000	Preseason	4,010	171	97	378
23	29-May	18,327	Average[a]	3,212	228	148	527
24	05-Jun	18,896	Average[a]	3,212	360	353	879
25	12-Jun	18,963	Average[a]	3,212	503	394	1274
26	19-Jun	18,807	Average[a]	3,212	869	687	2069
27	26-Jun	21,206	Average[a]	3,212	574	400	2281
28	03-Jul	22,716	Average[a]	3,212	281	885	3142
29	10-Jul	22,716	Average[a]	3,212	172	184	3447
30	17-Jul	22,716	Average[a]	3,212	93	80	3436
31	24-Jul	22,716	Average[a]	3,212	47	21	3464
32	31-Julu	22,716	Average[a]	3,212	24	05	3491
33	07-Aug	22,716	Average[a]	3,212	60	8	3505
Postseason Final		19,797					3,104
U.S. Estimates[a]							
19	2-May	30,000	Preseason	3,590	224	45	45
20	9-May	30,000	Preseason	3,590	276	104	149
21	16-May	30,000	Preseason	3,590	411	171	320
22	23-May	30,000	Preseason	3,590	556	348	668
23	30-May	18,327	Average[a]	3,400	669	295	1,056
24	6-Jun	18,896	Average[a]	3,400	585	31	1,100
25	13-Jun	18,963	Average[a]	3,400	338	106	1,372
26	20-Jun	18,807	Average[a]	3,400	163	261	1,708
27	27-Jun	21,206	Average[a]	3,400	81	450	2,242
28	4-Jul	22,716	Average[a]	3,400	43	515	3,110
29	11-Jul	22,716	Average[a]	3,400	23	105	3,454
Postseason Final		19,797					3,032

[a] Average of mark-recapture and SCMM

[b] TAC includes the base level catch for US and Canada plus an assessment/test fish allocation of 910 large Chinook salmon for Canada

Plus an allowable catch for the first four weeks of the fishery. The assessment/test fish allocation of 910 fish was distributed over a three week period (SW 20–22).

The preseason forecast for the Stikine River large Chinook salmon terminal run was approximately 30,000 fish (Table 1), which indicated a run size characterized as below average. Joint Canadian and U.S. inseason predictions of terminal run size ranged from 18,300 to 22,700 large Chinook salmon (Table 1). Managers used the daily catch and effort data transmitted from the Kakwan Point tagging site to make daily run projections. Joint weekly run size estimates were calculated on Wednesday or Thursday of the current week and were used to set the following week's fishery openings. Managers used the average of the model and MR estimates in SW 23–34. All inseason projections indicated a run size that was less than the preseason expectation and well below the average run size. Based on MR data from the inriver commercial fishery, the final postseason estimated terminal run size of Stikine large Chinook salmon was 19,797 fish, below the final preliminary inseason estimate of 22,700 large Chinook salmon (Table 1). The 2011 Little Tahltan escapement of 1,753 fish represents approximately 12% of the total inriver escapement of 14,412 fish; compared to the average of approximately 16%.

Sockeye Salmon

The preseason forecast for the Stikine River sockeye salmon terminal run was approximately 183,300 fish (Table 2); characterized as an average run. The forecast included approximately 62,500 natural Tahltan sockeye salmon, 25,700 stocked Tahltan fish, 43,100 stocked Tuya sockeye salmon, and 51,600 mainstem sockeye salmon. The preseason forecast was used through SW 27 for the inriver fishery. After SW 27, Canada used the SMM and other methods to generate weekly run sizes. The U.S. used the SMM beginning in SW 27 for District 106 and 108.

Starting in SW 27, weekly inputs of the harvest, effort, and stock composition were entered into the SMM to provide weekly forecasts of run size and TAC. Specific inputs include proportion Tahltan/Tuya from egg diameters, proportion enhanced Tuya from thermal mark analyses of otoliths in the Canadian lower river test (when in operation) and commercial fisheries; the upper river harvest in the AF and upper river commercial fishery; the harvest, effort and assumed stock composition in Subdistrict 106-41 (Sumner Strait), District 108, and Subdistrict 106-30 (Clarence Strait).

The SMM provides inseason projections of the Stikine River sockeye salmon run, including: the Tahltan stock (wild and enhanced combined); the stocked Tuya stock; and the mainstem stocks. The SMM uses linear regression by historical stock specific harvest data to predict run size from cumulative CPUE for each week of the fisheries. It breaks the stock proportions in District 106 and 108 harvests, from historical postseason scale pattern analysis (SPA) into triggers of run size for Tahltan and Mainstem; the averages used each week depended upon whether the run was judged to be below average (0–40,000), average (40,000–80,000), or above average (greater than 80,000). The SMM for 2010 was based on CPUE data from 1994 to 2006 from the Alaska District 106 fishery and the Canadian commercial fishery in the lower river and from the lower Stikine River test fishery from 1986 to 2004. The enhanced Tuya and Tahltan stock proportions are adjusted inseason based on the analysis of otolith samples taken in Districts 106 and 108.

Generally, the SMM has used the Canadian Lower River Commercial (LRCF) fishery CPUE to estimate the inriver run size, but both LRCF and Lower River Test fishery CPUE were entered into the SMM model to compare and contrast the respective run sizes generated from each of the inputs. In 2011 the upper commercial fishing zone (Flood fishery) was not opened for harvest; in years that it is opened, the harvest and effort from this area are excluded from the CPUE and not used in the model estimate. The annual weekly CPUE values were adjusted in order to make the current year data comparable with historical CPUE. For example, during 1979–1994 and 2000–2004, only one net per licence was permitted, while in 1996–1999 and 2005–2009 two nets per license were allowed. Only one net was permitted in the 2011 fishing season and the model was adjusted accordingly. An additional seven commercial licences were fished in 2011. These licences were leased from inactive commercial licence holders. The model was not adjusted to account for the additional licenses fished.

Table 2. Weekly forecasts of terminal run size and total allowable harvest for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2011.

				TAC			Cumulative Harvest	
SW	Start Date	Estimate	Method	Total	U.S.	Canada	U.S.	Canada
Model generated by Canada								
25	12-Jun	183,977	Preseason	115,013	57,506	57,506		33
26	19-Jun	183,977	Preseason	115,013	57,506	57,506		3,493
27	26-Jun	183,300	Preseason	115,013	57,506	57,506		7,600
28	3-Jul	173,400	Model (test) & inriver reg	98,770	49,385	49,385		27,227
29	10-Jul	161,700	Model (com) & inriver reg	108,522	54,261	54,261		35,113
30	17-Jul	175,800	Model (com) & inriver reg	111,446	55,723	55,723		44,165
31	24-Jul	183,900	Model (com&test) & inriver reg	111,446	55,723	55,723		48,416
32	31-Jul	187,700	Model (com&test) & inriver reg	107,668	53,834	53,834		53,001
33	7-Aug	189,500	Model/Inriver Reg/run recontn	106,926	53,463	53,463		54,799
34	14-Aug	200,000	Model/Inriver Reg/run recontn	101,816	50,908	50,908		55,294
35	21-Aug	200,000	Model/Inriver Reg/run recontn	104,854	52,427	52,427		55,396
36	28-Aug	200,000	Model/Inriver Reg/run recontn	104,854	52,427	52,427		55,621
Model generated by U.S.								
25	12-Jun	182,977	Preseason	115,013	57,506	57,506		
26	19-Jun	182,977	Preseason	115,013	57,506	57,506	10,559	
27	26-Jun	174,543	Model	115,013	57,506	57,506	32,705	
28	3-Jul	166,157	Model	103,420	51,710	51,710	51,397	
29	10-Jul	173,934	Model	112,636	56,318	56,318	57,864	
30	17-Jul	166,015	Model	102,948	51,474	51,474	61,463	
31	24-Jul	168,391	Model	105,126	52,563	52,563	64,268	
32	31-Jul	161,220	Model	145,577	72,788	97,790	48,895	
33	7-Aug	160,593	Model	97,088	48,544	48,544	59,684	
34	14-Aug	161,602	Model	98,482	49,241	49,241		
Postseason		213,399		132,433	73,857	55,440		

[a] Does not include test fishery harvests

The weekly inputs to the Tahltan sockeye salmon regression model included the cumulative weekly CPUE of Tahltan Lake sockeye salmon (1998–2008: from SW 28 to 33 all correlations were significant and ranged from an r^2 of 0.67 in SW 28 to an r^2 of 0.91 SW 33). The contribution of Tuya origin sockeye salmon was based on otolith marks and presented as a ratio of the total Tahltan run size. The contribution of mainstem sockeye salmon was based on egg diameter measurements and presented as a ratio of total Tahltan run size or calculated based on a regression of cumulative CPUE against the inriver run size (1998–2008: from SW 28 to 33 all correlations were significant and ranged from an r^2 of 0.31 in SW 28 to an r^2 of 0.64 SW 33). The contribution of Tuya sockeye salmon (thermal marks) and mainstem sockeye salmon (large eggs) were expressed as a ratio of the total Tahltan Lake run. Preliminary results of thermal mark analyses were available inseason for the marine and lower river fisheries to account for

Tuya production in the model and reduce the risk of over estimating the TAC of Tahltan sockeye salmon.

Canadian inseason predictions of terminal run ranged from 161,700 to 200,000 sockeye salmon; U.S. forecasts ranged from 160,600 to 173,900 fish (Table 2). Differences in U.S. and Canadian weekly predictions are due to strikingly different approaches to assessing the inseason run size, with Canada electing to forego the model estimates and use the run reconstruction and Tahltan regression assessment methods for most of the fishing season.

U.S. Fisheries

The 2011 gillnet harvest in District 106 was 3,008 Chinook, 146,069 sockeye, 117,860 coho, 337,169 pink, and 156,096 chum salmon. Salmon harvests were above average for Chinook, sockeye, and pink salmon. The coho and chum salmon harvests were below average. The postseason estimate of Stikine River sockeye salmon harvested in District 106 based on SPA was 30,765 fish or approximately 21% of the harvest. Enhanced sockeye salmon from local releases (mostly Neck and Lake and Burnett Inlet) contributed approximately 5,553 sockeye salmon (3.8%) to the District 106 harvest. An estimated 1,091 Chinook salmon in the District 106 harvest (52%) were of Alaska hatchery origin. An estimated 59,015 coho salmon in the District 106 harvest were of Alaska hatchery origin, 50% of the total coho salmon harvest. The District 106 drift gillnet fishery was open for 41 days from June 13 through September 27. Total fishing time was below average of 49.6 days. Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Weekly fishing effort in number of vessels fishing in District 106 was above average for half of the weekly fishing periods. The greatest effort of vessels fishing occurred in SW 38 with 101 boats fishing. The total season effort was near average at 2,647 boat days.

The Sumner Strait fishery (Subdistricts 106-41) harvested an estimated 28,380 Stikine River sockeye salmon; 31% of the total sockeye salmon harvest in that subdistrict. The Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 2,385 Stikine River sockeye salmon; 4% of the total sockeye salmon harvest in that subdistrict.

The District 108 total season gillnet harvest was 5,321 Chinook, 51,478 sockeye, 20,720 coho, 65,022 pink, and 142,526 chum salmon. Sockeye, pink, and chum harvests were above average, while Chinook and coho salmon harvests were below average. The District 108 fishery harvested an estimated 41,351 Stikine River sockeye salmon, 81% of the District 108 sockeye salmon harvest. An estimated 11% (2,166 fish) of the District 108 coho salmon harvest was of Alaskan hatchery origin. The District 108 fishery started on June 20 after being postponed due to concerns for Stikine Chinook salmon. District 108 closed concurrently with District 106 on September 27. The 41 days the district was open is near average, excluding periods in years when a directed Chinook salmon fishery occurred. The weekly fishing effort in number of vessels fishing in District 108 was variable with about half the weekly fishing periods receiving higher than average effort.

In 2011, U.S. Federal subsistence Chinook, sockeye, and coho salmon fisheries were conducted on the Stikine River. The subsistence fisheries are managed by the United States Forest Service (USFS). A permit issued by the USFS to federally qualified users is required for subsistence fishing in the Stikine River and takes place from marine waters to the U.S./Canadian border. Subsistence fishing in "clearwater" tributaries or side channels and at stock assessment sites is prohibited. The annual guideline harvest levels were 125 Chinook, 600 sockeye, and 400 coho salmon in 2011. The fishery was open from May 15 to June 20 for Chinook salmon, June 21 to July 31 for sockeye salmon, and August 1 to October 1 for coho salmon. The allowable gear for the fishery includes: dipnets, spears, gaffs, rod and reel, beach seine, and gillnets not exceeding 15 fathoms in length with mesh size no larger than 5½ inches, except during the Chinook salmon fishery when nets with mesh up to 8 inches are allowed. A total of 124 permits were issued and the estimated harvests included 61 large Chinook, 1,741 sockeye, and 40 coho salmon.

In 2011, directed Chinook salmon commercial fisheries did not occur for the third consecutive season since directed fisheries began in 2005. The preseason terminal run forecast of 30,000 Stikine large Chinook salmon resulted in a U.S. AC of 190 fish. An AC of this size did not allow for directed commercial fisheries but allowed for liberalization of the District 8 sport fishery. Liberalization measures included increased daily and annual bag limits and the use of two rods per person. Inseason forecasts, ranging between 18,327 and 22,716 Stikine large Chinook salmon, were considerably lower than the preseason forecasts and were not large enough to allow for any AC above BLCs. The final postseason estimate of the terminal run based on MR information, was 19,797 large Chinook salmon.

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2011.

				Total	Tahltan	
	All Tahltan	Tuya	Mainstem	Stikine	Enhaced Tahltan	Wild Tahltan
Escapement[a]	34,248	13,953	29,393	77,594	12,017	22,231
ESSR Harvest[b]	0			0		
Broodstock	4,559			4,559	1,769	2,790
Natural Spawning	29,689		29,393	59,082	10,248	19,441
Excess[c]		13,953		13,953		
Biological Samples	340	153		493	106	234
Canadian Harvest						
Aboriginal	4,620	1,957	316	6,893	1,540	3,080
Upper Commercial	659	280	33	972	234	425
Lower Commercial	23,530	10,106	13,939	47,575	8,924	14,606
Total	28,810	12,343	14,287	55,440	10,698	18,112
% Harvest	43.5%	41.6%	42.9%	42.9%	37.8%	47.7%
Test Fishery Harvest	841	482	1,813	3,136	361	480
Tuya Test	988	1,634	257	2,878	365	622
All Inriver harvest	30,638	14,459	16,357	61,454	11,424	19,215
(harvest + samples)	30,978	14,612	16,357	61,947	11,530	19,448
Inriver Run	65,226	28,565	45,750	139,541	23,440	41,446
U.S. Harvest[a]						
106-41&42	13,454	8,972	5,954	28,380	7,300	6,155
106-30	296	721	1,368	2,385	150	146
108	22,916	7,307	11,127	41,351	9,834	13,083
Subsistence	814	356	571	1,741	309	505
Total	37,480	17,356	19,021	73,857	17,592	19,888
% Harvest	56.5%	58.4%	57.1%	57.1%	62.2%	52.3%
Test Fishery Harvest	0	0	0	0	0	0
Terminal Run	102,706	45,921	64,771	213,399	41,032	61,334
Escapement Goal	24,000	0	30,000			
Terminal Excess[d]		11,107				
Total TAC	77,865	34,814	32,958	145,638		
Total Harvest[e]	67,131	30,181	35,121	132,433		
Canada TAC	38,933	17,407	16,479	72,819		
Actual Harvest[f,g]	28,810	12,343	14,287	55,440		
% of total TAC	74%	71%	87%	76%		
U.S. TAC	38,933	17,407	16,479	72,819		
Actual Harvest[f,g]	37,480	17,356	19,021	73,857		
% of total TAC	96%	100%	115%	101%		

U.S. overage/underage

Canada overage/underage

[a] Escapement into terminal and spawning areas from traditional fisheries.

[b] Harvest allowed in terminal areas under the Excess Salmon to Spawning Requirement license.

[c] Fish returning to the Tuya system are not able to access the lake where they originated due to velocity barriers.

[d] The number of Tuya fish that should be passed through traditional fisheries in order to harvest the Tuya stock at the same rate as the Tahltan stock to ensure adequate spawning escapement for Tahltan fish.

[e] Includes traditional, ESSR, and test fishery Harvestes.

[f] Does not include ESSR or test fishery Harvestes.

[g] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for Harvestes other than in the listed fisheries.

The total number of Stikine large Chinook salmon harvested by District 108 gillnet fishery from SW 26 through SW29 (during sockeye salmon management openings) was 1,431 fish. The initial gillnet sockeye salmon opening was postponed by one week in District 108 due to the low inseason forecasts of Stikine large Chinook salmon abundance. District 108 troll hatchery access openings through the end of June resulted in a total harvest of 471 Stikine Chinook salmon. Troll openings were limited in time and areas were closed due to the poor run. The District 108 sport fish Stikine Chinook salmon harvest estimate from SW 18 through 29 was 1,063 fish. The sport fishery was deliberalized starting June 21. The final cumulative U.S. harvest of Stikine large Chinook salmon through SW 29, including the Federal Stikine subsistence fishery, was 3,032 fish. The final postseason estimate of the run size was not large enough to produce a U.S. AC; however, the U.S. harvest was below the base level harvest of 3,400 fish.

The District 106 gillnet season began at 12:00 noon on Monday, June 12 (SW 25), for an initial two-day period. Monday openings occurred during the first two sockeye salmon management periods due to a recent Board of Fish action attempting to minimize interactions between commercial and sport fisheries on the weekends. No additional area closures were implemented in District 106 and District 108 remained closed for this initial opening. The first sockeye salmon opening is normally two days. Any decision to extend fishing time during the first three openers is based primarily on the preseason forecast and on fishery performance estimated by management biologists monitoring the fishery on the grounds. Sockeye salmon harvests were below average in most areas and the fishery closed after two days. For this initial sockeye salmon opening, 25 boats fished in Clarence Strait (106-30) and 50 boats fished in Sumner Strait (106-41). The preseason forecast for a total Stikine River TAC of 182,800 sockeye salmon (Table 2). This run size would allow the U.S. fisheries to harvest a total of 57,507 Stikine River sockeye salmon, which includes 31,700 Tahltan fish. The preseason forecast was used for SW 25 through 27, while inriver run estimates were produced weekly starting in SW 27 and used throughout the remainder of the season.

During SW 26 (June 19–June 25) there were 42 boats fishing in Sumner Strait, 22 boats fishing in Clarence Strait, and 34 boats fishing in District 108 during the total three days of fishing. This was the first opening of the season in District 108. Lines for the initial commercial opening in District 108 were expanded beyond the Stikine River flats to mitigate the harvests of Chinook salmon returning to the Stikine River. The initial opening was announced for two days in each district. Both districts were extended by an additional day primarily due to above average sockeye salmon harvest rates in both Districts 106 and 108 as indicated by inseason fishery monitoring. Otolith readings for subdistrict 106-41 indicated that 15.6% of the harvest was comprised of thermally marked Tahltan fish, while 11.2% were Tuya fish. In District 108, 32.3% were thermally marked Tahltan fish and 17.9% were Tuya fish.

During SW 27 (June 26–July 2) there were 42 boats fishing in Sumner Strait, 18 boats fishing in Clarence Strait and 49 boats fishing in District 108. Both districts were opened for an initial three days and the line restrictions were pulled in to the commonly used lines that close off the Stikine River flats. Inseason fishery monitoring indicated that sockeye salmon abundance in Districts 106 and 108 were well above average. Due to the below average preseason forecast, only a 24 hour extension in both districts occurred. The first inseason terminal run estimate produced later in the week resulted in 166,158 fish less than the preseason forecast. The estimated run size of Tahltan sockeye salmon increased while the other Stikine stocks decreased. The peak sockeye salmon harvest for the season in both districts occurred this week with over 40,000 sockeye salmon harvested. Of this harvest, about 66% was estimated to be Stikine fish. The otolith readings for Subdistrict 106-41 for SW 27 indicated that 14.5% of the harvest was comprised of thermally marked Tahltan fish while 18.4% were Tuya fish. The District 108 reading indicated 26.8% thermally marked Tahltan fish and 18.9% Tuya fish.

During SW 28 (July 3–July 9) Districts 106 and 108 were opened for an initial three days. There were 27 boats fishing in Clarence Strait, 44 boats in Sumner Strait, and a total of 48 boats fishing in District 108 for the week. Surveys on the fishing grounds indicated that sockeye salmon harvest rates remained strong in both districts. With above average sockeye salmon harvest in both districts and below average effort in 108 and average effort in 106, a 24-hour extension was announced for both districts. Otolith readings for SW 28 indicated that marked Tahltan fish contributed 6.3% of the 106-41 harvest and 16.1% of the District 108 harvest. Marked Tuya fish contributed to 10.5% of the 106-41 harvest and 23.4% of the District 108 harvest. The second inseason Stikine run size estimate increased from the prior week to 173,934 fish, but still remained below the preseason forecast. The U.S. AC was estimated to be 56,318 fish with a Tahltan AC of 39,278. The U.S. harvest of Stikine sockeye salmon through this week was 56,601, including 32,748 Tahltan fish. The estimated run sizes produced by the SMM were in question due the unknown of how the increase in the number Canadian permits fishing in the lower river was affecting CPUE, one of the key SMM inputs. However, it was thought that the lower CPUE may be offsetting the good inriver fishing conditions created by below average flows.

During SW 29 (July 10–July 16) 29 boats fished in Clarence Strait, 36 boats fished in Sumner Strait, and 30 boats fished in District 108. This was the initial week of the McDonald Lake sockeye salmon conservation period, which preempted a reduction of fishing time to a maximum of two days in District 6. Any additional time during this three-week period would be in the form of midweek openings in District 108. Effort was below average in both districts with sockeye salmon harvest rates above average for those boats fishing in traditional sockeye salmon areas. Despite continued good fishery performance, the run size estimates produced by SMM continued to be lower than the preseason forecast and no additional fishing time occurred. The estimate produced near the end of the week resulted in decrease in the Stikine sockeye salmon run size. The estimate of Tahltan returning fish decreased from the prior week, whereas the mainstem estimate increased. The U.S. AC of Stikine fish was estimated to be 51,474. The U.S. cumulative harvest through this week was 59,359 fish. SW 29 otolith readings indicated that marked Tahltan fish contributed 5.1% of the 106-41 harvest and 11.7% of the District 108 harvest. Marked Tuya fish contributed to 9.7% of the 106-41 harvest and 13.0% of the District 108 harvest. The first Tahltan weir counts that were received at the end of the week were very good with almost 9,000 sockeye salmon through the weir in just two days. The well above average weir count indicated that the SMM was likely underestimating at least the Tahltan component of the Stikine River sockeye salmon run.

Effort shifted during SW 30 (July 17–July 23) as 33 boats fished in Clarence Strait, 25 boats fished in Sumner Strait, and 61 boats fished in District 108. The majority of boats fishing in District 108 were targeting enhanced chum salmon run to Anita Bay. Both districts were open for an initial two days. A midweek opening in District 8 for 24 hours was announced on the grounds. The additional time was based on low expected sockeye salmon harvest due to low effort targeting sockeye salmon, continued above average sockeye salmon harvest rates for both districts, and an increase in estimated Stikine River sockeye salmon abundance. This week's SMM produced a slightly higher Stikine sockeye salmon run size estimate with estimated terminal run size of 168,391 fish. The resultant U.S. AC was 52,563 fish. The estimated mainstem run size continued to increase, while the Tahltan estimated run size continued to decrease. However, by this time, the Tahltan weir count was over 20,000 sockeye salmon indicating the Tahltan run size was going to be larger than the SMM estimated. The U.S. harvest of Stikine sockeye salmon through SW 30 was 63,032 fish with a harvest of 36,135 Tahltan fish. Otolith readings for SW 30 indicated that marked Tahltan fish contributed 3.0% of the 106-41 catch and 4.2% of the District 108 harvest.

Overall effort increased during SW 31 (July 24–July 30) with 29 boats fishing in Clarence Strait, 30 boats in Sumner Strait, and 72 boats in District 108. Both districts were open for an initial two days. Sockeye salmon harvest rates continued to be above average in both districts with below average effort in District 106 and above average effort in District 108. With no concerns for meeting escapement at Tahltan Lake and increasing mainstem run size estimates coupled with low expected harvest of Stikine sockeye salmon, a 24-hour midweek opening in District 108 occurred. Due to limitations from the McDonald Lake sockeye salmon action plan, no additional time was given in District 106. This was the last week of restrictions based on McDonald Lake sockeye salmon and for sockeye salmon based management for both districts. Estimates produced by the SMM this week and during the next two week's continued to indicate increasing mainstem and decreasing Tahltan run sizes but with a terminal run size estimate remaining around 161,000 Stikine sockeye salmon. The preliminary postseason estimate of U.S. harvest of Stikine sockeye salmon is 71,100 fish including a harvest 38,200 Tahltan and 15,000 mainstem fish. The preliminary postseason estimate of the Stikine River sockeye salmon run is 214,864. The resultant U.S. AC is estimated to be 73,642 Stikine sockeye salmon.

During SW 32 through 35 (July 31–August 27) both Districts 106 and 108 were managed for pink salmon. That portion of Section 6-D in District 106 along the Etolin Island shoreline was closed to gillnet fishing from SW 33 through SW 36 by regulation. In Districts 106 and 108, three day openings occurred in SW 32 and 33 based on above average harvest rates in SW 31 and good parent year escapements. Harvest rates were below average in SW 33 for both districts with some improvements in District 106 for SW 34. Improvements in pink harvest rates continued for both districts in SW 35. However, due to poor pink escapements to local systems, no additional fishing time was warranted during the remainder of the pink salmon management period. During the 2011 season, the fishing effort was generally above the weekly average effort in both districts throughout the pink salmon management period. Above average effort and a high price paid for pink salmon were likely the catalysts behind the above average total harvest in both districts.

During SW 36 (August 28–September 3) the management emphasis changed from pink salmon to wild coho salmon. Prior to the switch to coho salmon management, the District 106 fishery harvested 81,987 coho salmon, approximately 70% of the total District 106 coho salmon harvest. The Neck Lake/Burnett Inlet enhanced summer coho salmon runs comprised the majority of this early coho salmon harvest with an estimated contribution of approximately 52,000 fish in the District 106 fishery prior to SW 36. The average weekly Alaska hatchery coho salmon harvest rates in the District 106 fishery was above average until SW 32, at which point it remained below average for the rest of the gillnet season. During the coho salmon management period, pink and chum salmon remained the most abundant species in the harvest composition for the first three weeks of the season in District 106. The coho salmon harvest was below average in both Districts 106 and 108. The weekly wild coho salmon component of the harvest remained below average with a peak during SW 38, two weeks later than average. During the coho salmon management period, both districts had two-day openings except for SW 36 and 37, which were three-day openings. The 2011 gillnet season in both districts ended at noon on Tuesday, September 27.

Canadian Fisheries

Harvests from the combined Canadian commercial and aboriginal gillnet fisheries, and sport fishery in the Stikine River in 2011 included 2,336 large Chinook (includes 29 release mortalities), 1,565 nonlarge Chinook (includes 50 release mortalities), 55,440 sockeye, 5,821 coho, 99 chum, and 9 pink salmon. In addition some pink and chum salmon were released; all of the 232 steelhead trout caught were released. A test fishery designed to target on Tuya bound fish at a site located in the mainstem Stikine River between the mouth of the Tahltan and the mouth of the Tuya River yielded a harvest of 2,878 sockeye, 13 large Chinook, and 6 nonlarge Chinook salmon. A total of 799 large Chinook and 219 nonlarge Chinook salmon were harvested by the commercial fleet under the auspices of an assessment/test fishery. The PST test fishery quota was 1,400 large Chinook salmon; however, because the assessment/test fishery was only conducted during SW 23–25 (65% of the run), the guideline test fish harvest was adjusted to reflect this proportion resulting in a guideline harvest of only 912 large Chinook salmon.

The harvest of large Chinook salmon was below average and the third lowest harvest recorded since the targeted Chinook salmon fishery started in 2005. Harvests of nonlarge Chinook salmon; however were above average. The sockeye salmon harvest was below average. The final estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-stocking programme to the combined Canadian aboriginal and commercial fisheries was 23,041 fish, 40% of the harvest. The harvest of 5,821 coho salmon was above average.

A sockeye salmon test fishery was conducted for stock assessment purposes in the lower Stikine River from 19 June to 02 September, 2011. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery harvests totaled 22 large Chinook, 29 nonlarge Chinook, 3,136 sockeye, 410 coho, 197 pink, 100 chum salmon, and 30 steelhead trout (all steelhead trout, chum and pink salmon were released). The objectives of the sockeye salmon test fishery were similar to those in previous years: to provide inseason catch, stock ID and effort data for input, if necessary, into the SMM to estimate the inriver run size; and, to determine migratory timing and stock composition of the sockeye salmon run for use in the postseason estimations of the inriver sockeye salmon run.

A coho salmon test fishery was conducted in the lower Stikine River from 03 September to 11 October, 2011. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery harvests totaled: 186 coho, 5 chum, 7 pink, and 18 steelhead trout (all steelhead were released). The objective of this test fishery was to provide an index harvest expressed in cumulative weekly CPUE to complement and compare with the existing test fishery historical data set (1986–2010), which provides an interannual measure of the relative run strength of Stikine coho salmon.

Lower Stikine River Commercial Fishery

The Stikine River lower Canadian commercial fishery harvest was 1,737 large Chinook, 1,260 nonlarge Chinook, 47,575 sockeye, 5,821 coho, 3 pink, and 99 chum salmon. A total of 232 steelhead trout were released in 2011; some pink and chum salmon were also released. For the Chinook salmon harvest, 353 fish were harvested in a directed Chinook salmon fishery during SW 20–22. An additional harvest of 799 large Chinook salmon was accounted against the assessment/test fish allocation of 1,400 large Chinook. The harvest excludes an estimated released fish mortality of 29 large and 50 nonlarge fish. The harvests of sockeye and large Chinook salmon were below average, while the harvests of nonlarge Chinook and coho salmon were above average. There was a limited targeted Chinook salmon fishery in 2011 occurring from SW 20–22. The initial targeted fishery was based on the preseason estimated terminal run of 30,000 large Chinook salmon. Post SW 22, the inseason run size estimate dropped to 18,600 Chinook salmon which resulted in the closure of the commercial fishery. The commercial fishing fleet, however, served as an assessment/test fishery from SW 23–25 with a guideline harvest quota of 900 fish. The objective of the assessment/test fishery was primarily to collect spaghetti tags applied 20 km downstream and thus provide a means to generate inseason run size estimates.

The fleet targeted Chinook salmon for a total of 4 days, below the average of 21 days. Sockeye salmon were targeted for a total of 25 days, below the average of 31 days. The coho salmon fishery was opened for a total of 16 days, above the average of 7 days.

Based on final postseason estimates (Table 3) the stock composition of the lower river sockeye salmon harvest was 8,924 stocked Tahltan fish, which accounted for 19% of the sockeye salmon harvest; 18,112 wild Tahltan fish accounting for 32% of the harvest;

14,287 mainstem fish accounting for 29% of the harvest; and 10,106 stocked Tuya fish which accounted for 20% of the harvest.

Stock compositions of the commercial Chinook salmon harvest taken incidentally in the targeted sockeye salmon fisheries are not available. However, assuming that the Chinook salmon harvest reflects the contribution of the Little Tahltan and 'other' stocks to the total inriver escapement, the commercial harvest of Chinook salmon of Little Tahltan origin was under 250 large Chinook salmon, the harvest of large Chinook salmon originating from 'other' stocks was approximately 1,500 fish.

Weekly Chinook and sockeye salmon guideline harvests, based on SCMM, SMM, MR and other forecasts of the TAC apportioned by average run timing and domestic and international allocation agreements, were developed each week to guide management decisions during the Chinook and sockeye salmon seasons. After SW 25 for purposes of managing the lower river harvest, 800 large Chinook salmon were allocated to the upper Stikine fisheries: 100 fish in the sport, 20 fish in the upper commercial, and 680 fish in the Aboriginal fishery. A total of 8,000 sockeye salmon was allocated to the upper Stikine commercial and aboriginal fishery. The remaining balance of the Chinook and sockeye salmon TAC was allocated to the lower Stikine commercial fishery. Particular attention was directed at weekly Chinook salmon guideline harvests and the inriver run and escapement projections of the various sockeye salmon stock groupings. Management through SW 25 was focused primarily on the harvest of large Chinook salmon, under the auspices of an assessment/test fishery from SW 23–25. From SW 26 through SW 29 (19 June–16 July), management emphasis switched to the Tahltan and Tuya lake sockeye salmon stock groupings after which time the sole focus was the management of mainstem sockeye salmon stocks through the end of the sockeye salmon fishery on SW 34 (14–20 Aug). As in 2010, the management mainstem sockeye salmon was advanced from SW 31 (24–30 July) to SW 30 (17–23 July) in 2011 in an attempt to avert the downward trending escapement of this stock. The coho salmon management regime commenced on SW 35 (21-27 August).

The preseason estimate of 30,000 large Chinook salmon was above the treaty agreed to threshold run size of 28,100 fish that triggers a directed fishery. Targeted commercial fisheries, therefore, could be prosecuted by both Canada and the U.S. The TTC agreed to Canada conducting an assessment/test fishery using the Canadian commercial fleet should the inriver run size estimate be under the threshold limit of 24,500 large Chinook salmon. The fleet, however, would be under a tightly controlled fishing regime. This was done in order to collect inseason CPUE and tag recovery data required to generate weekly run size estimates. The assessment/test fishery harvest was capped at 1,400 large Chinook salmon.

The Canadian guideline harvests in a directed Chinook salmon fishery were based on an AC of 1,710 fish taken from SW 20 to SW 22 (08-22 May) , were derived from historical run timing data from the 2005–2009 inriver commercial fisheries and the 2000–2003, 2010 inriver test fisheries. The same metrics were used to generate weekly guideline harvests under a test/assessment fishery scenario which occurred in SW 23–24 (29 May–

18 June). During the early component of the directed sockeye salmon fishery when incidental Chinook salmon harvests occurred, weekly guidelines of the Chinook salmon BLC were generated using the same run timing as articulated above. The directed Chinook salmon fishery regime commenced at 1200 hours 08 May. The Chinook salmon test/assessment fishery regime commenced at 0800 hours 30 May (SW 23). The sockeye salmon fishery regime (harvesting Chinook salmon allocated under the BLC) commenced at 1200 hours 19 June (SW 26). Fishers were limited to one net with a maximum length of 135 m. The maximum mesh size was 203 mm (8 inches). An additional seven licences were fished in 2011. These licences were leased by active commercial fishers from licence holders that have not participated in the fishery for over a decade. The fishing zone extended from the Canada/ U.S. boundary to a point near the confluence of the Porcupine and Stikine rivers.

In a response to four consecutive years of under escapement of Little Tahltan Chinook salmon, the Canadian fishery was delayed one week and the AC was reduced 30% until an inseason run size was generated.

The first directed Chinook salmon fishery opening was posted for 24 hours commencing at 1200 hours 08 May (SW 20). The guideline harvest was 107 large Chinook salmon. Fishing conditions were relatively good. The estimated projected harvest of 80 fish derived from a hail taken at 0800 hours 09 May prompted a 6 hour extension. The total weekly harvest taken in a 30 hour fishery was 107 large and 15 nonlarge Chinook salmon. The catch boat day (c/b/d) adjusted for comparison purposes (specifically, expanded by 30% to reflect what the c/b/d would have been should the standard two nets had been deployed) was 5.0 compared to the recent 6-year average of 19.9 large Chinook salmon. The cumulative catch per hour at the Kakwan tagging site was 45% of average, and the harvest to date taken by the District 108 recreational fishery was 21% of average.

The fishery was posted for and initial 24 hour opening in SW 21 (15-21 May) with a weekly guideline harvest of 129 large Chinook salmon. An estimated harvest derived from a hail after 10 hours of fishing was 80 fish which resulted in holding the fishery at 24 hours. The final harvest was 174 large and 37 nonlarge Chinook salmon taken under fair to moderate fishing conditions. The CPUE of 15 large Chinook salmon was below the recent 6-year average of 17 large Chinook salmon. The CPUE at the Kakwan tagging site was 7 % of average, while the harvest to date taken by the District 108 recreational fishery was 26 % of average. This week's low catch rates at Kakwan and in District 108's sport fishery showed early signs of a relatively low Chinook salmon run.

The fishery was posted for an initial 20 hour period in SW 22 (22–28 May) with a weekly guideline harvest of 120 large Chinook salmon. The estimated harvest of only 19 large Chinook salmon after 8 hours fishing prompted a 10 hour extension. The reported harvest of 38 Chinook salmon after 24 hours fishing resulted in another extension for this week's fishery. The total fishing time amounted to 48 hours and yielded a harvest of 97 large and 8 nonlarge Chinook salmon. The fishing conditions deteriorated this week due to rapidly rising water. The CPUE of 5 large Chinook salmon was below the recent 6-year average of 16 large Chinook salmon. The cumulative CPUE at the Kakwan tagging site was 33%

of average, while the harvest to date taken by the District 108 recreational fishery was 40% of average. The SCMM generated a run size of 18,300 large Chinook salmon, well below the trigger threshold, the minimum inseason run size of 24,500 fish. As a result, the directed commercial fishery was closed. An assessment/test fishery using the commercial fleet was announced for next week, SW 23 (29 May-04 June). Although Canada's response to the jointly agreed to run size was the closure of the commercial fishery, the response by the U.S. was to permit both the continuation of the subsistence fishery and the liberalized sport fishery, which was liberalized due to an AC in a directed Chinook salmon fishery. This week's run size indicated that directed fisheries could not proceed as articulated in the PST harvest share arrangements.

In SW 23 (29 May–04 June) the assessment/test fishery commenced with the objective of providing a measure (tag recoveries and CPUE) of weekly and terminal run size estimates required to govern fisheries management decisions. The weekly guideline harvest was based on Chinook salmon run timing as discussed above. The fishery was posted for an initial 10 hour period starting at 0800 hours 30 May with a weekly guideline harvest of 228 large Chinook salmon. The estimated harvest of 62 fish after 6 hours of fishing prompted a 12 hour extension. The final harvest after 28 hours fishing time was 148 large and 21 nonlarge Chinook salmon. The fishing conditions at the outset of the opening were moderate and conditions were very poor for the latter part of the opening due to the rising river. The CPUE of 13 large Chinook salmon was well below the recent 6-year average of 23 large Chinook salmon. The CPUE at the Kakwan tagging site was 23% of average, while the harvest to date taken by the District 108 recreational fishery was 48% of average. The low inseason run size estimate of 18,900 large Chinook salmon (based on model and MR), was further supported by the below average CWT recoveries of Stikine origin Chinook salmon harvested in approach water troll fisheries.

In SW 24 (05–11 June) the assessment/test fishery was posted for an initial 12 hours period with a weekly guideline harvest of 328 large Chinook salmon. The estimated harvest of 136 large Chinook salmon after 6 hours of fishing prompted a 3 hour extension. The final harvest after 15 hours fishing time was 353 large and 45 nonlarge Chinook salmon taken under moderate to good fishing (river level dropping). The CPUE of 50 large Chinook salmon was above the recent 6-year average of 39 large Chinook salmon. The CPUE at the Kakwan tagging site, however, was 29% of average, while the harvest to date taken by the District 108 recreational fishery was 48% of average. No harvests were reported from the upper Stikine aboriginal fishery when on average over 100 large Chinook salmon are harvested by this week. The run size estimate based on averaging the SCMM and MR estimate generated late this week remained at 18,900 fish. The CWT recoveries of Stikine origin Chinook salmon taken approach water troll fisheries remained below average, indicating that it was unlikely that the run was late.

The assessment/test fishery was posted for an initial 12 hour period in SW 25 (12–18 June) with a weekly guideline harvest of 349 large Chinook salmon. The estimated harvest of 206 large Chinook salmon after 6 hours fishing resulted in limiting this week's opening to 12 hours as per the initial posting. The final harvest was 394 large and 57 nonlarge Chinook salmon taken under very good fishing conditions (river rapidly dropping). The CPUE of 70 large Chinook salmon was well above the recent 6-year average of 34 large Chinook salmon. The CPUE at the Kakwan tagging site increased to 44% of average, while the harvest to date taken by the District 108 recreational fishery was 50% of average. The harvests taken in the upper Stikine aboriginal fishery remained below average this week. The new run size estimate of 18,500, based on averaging the SCMM and MR estimate, remained close to last week's estimate. This week marked the final week of the Chinook salmon assessment/test fishery. The total harvest of 799 large Chinook salmon was just short of the 912 assessment/test fish quota for SW 23–25. A total of 14 tags were recovered in the course of the assessment/test fishery, which provided for inseason MR estimates and accounted for 14 % of the tag recoveries for the season.

In SW 26 (19–25 June) the fishery management focus switched from Chinook salmon to sockeye salmon; however, the weak Chinook salmon run resulted in managing the fishery based on both sockeye and Chinook salmon escapement considerations. The sockeye salmon management regime was focused on the Tahltan stock group through SW 29 (10–16 July). The guideline harvest for Chinook salmon was based on the BLC of 1,500 large fish, partitioned by historical run timing through the fishery from SW 26 (19–25 June) through to SW 30 (17–23 July). The total BLC was 2,300 fish; 1,500 fish were allocated to the lower river fishery and the rest allocated to aboriginal, upper commercial and recreational fisheries. In order to minimize the incidental harvest of Chinook salmon, a mesh size restriction of 140 mm (5.5 inch) was implemented. Fishers were permitted one net only and the commercial fishing grounds remained the same as that defined in the Chinook salmon assessment/test fishery.

The first targeted sockeye salmon fishery for the 2011 season was delayed from the typical Sunday noon opening and was posted for an initial 24 hour period commencing Wednesday noon. The rationale for the three day delay was to provide additional time for Chinook salmon passage and thus limit incidental harvests of same in the course targeting sockeye salmon. The guideline Chinook salmon harvest for SW 26 (19–25 June) was 700 fish and the sockeye salmon guideline harvest was 3,900 fish, including 2,800 Tahltan Lake sockeye salmon. The sockeye salmon TAC was based on the preseason expectation of 183,000 fish. A harvest estimate of 760 sockeye and 67 large Chinook salmon after 6 hours fishing prompted a one day extension. The day one harvest of 1,659 sockeye salmon was near expectation; the sockeye salmon CPUE of 90 fish was above the 62 fish average. The Tahltan Lake component was also above average. The Chinook salmon harvest of 270 fish (11 released) was below the guideline harvest of 700 fish. The fishing conditions were very good due to unseasonably low water flows; hence, the exploitation rate was probably higher than what it would have been during normal flow regimes. The two day fishery yielded a harvest of 488 large Chinook, 225 nonlarge Chinook and 3,453 sockeye salmon, which was close to the guideline harvests for both species. The total weekly sockeye salmon harvest was comprised of 30% Tahltan enhanced, 48% Tahltan wild, 15% Tuya, and 7% mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 71 fish; the average was 43 fish. U.S. District 108 was closed this week to protect Stikine bound Chinook salmon. District 106 sockeye salmon harvest was slightly above average. The Chinook salmon harvests in upper Stikine fishery continue to be below average. The Little Tahltan weir was installed this week. Twenty-one fish transited the weir vs. an average count of 58 by this date. The Kakwan CPUE was 54% of average.

The fishery was posted for an initial two day opening in SW 27 (26 June to 02 July) with a Chinook salmon guideline harvest of 615 fish and a sockeye salmon guideline harvest of 6,700 fish, including 5,900 Tahltan Lake sockeye salmon. The sockeye salmon TAC was based on the preseason expectation of 183,000 fish. Harvests of 1,638 sockeye and 270 large Chinook salmon after one day of fishing indicated that there was room to extend another day. An inseason model estimate of <113,000 using the test fish data was generated after two days of fishing. This estimate in concert with the below average CPUE of Tahltan Lake sockeye salmon prompted a decision not to extend beyond three days for this week's fishery. The fishing conditions were very good due to unseasonably low water flows; hence, the exploitation rate was probably higher than what it would have been during normal flow regimes. At this point in the fishery it was decided that no adjustment would be made to the CPUE generated by the 19 licences fishing in attempts to make it comparable to past years when there were 12 licences fishing. The rationale for no adjustment was that the river had extreme and unusual low flow; therefore increased CPUE would be offset by using the total complement of nets, n=19 rather than using some metric to factor down the effort to make it comparable to past years. The three day fishery yielded a harvest of 300 (2 released) large Chinook, 130 nonlarge Chinook and 3,949 sockeye salmon. This was below the Chinook salmon guideline harvest and below the sockeye salmon guideline harvest 4,300 fish, based on the most recent run size estimate of 114,00 fish. The total weekly sockeye salmon harvest was comprised of 31% Tahltan enhanced, 45% Tahltan wild, 22% Tuya, and 2%mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 59 fish; the average was 121 fish. It was noted that the Tuya run thus far is well below predicted. The cumulative Tahltan harvest of 3000 fish was below the TAC of 5,900 sockeye salmon. The low Tahltan Lake sockeye salmon CPUE, in spite of very good fishing conditions, was the main factor in limiting the fishery to only three days. The preliminary U.S. harvest reported in District 108 this week was high with a CPUE double the average. The Chinook salmon harvests in upper Stikine fishery continue to be below average. The Little Tahltan weir count followed suit with only 23 fish counted to date; below the average of 430 large Chinook salmon. The Kakwan CPUE was 59% of average this week.

In SW 28 (03–11 July) the fishery was posted for an initial three day opening with a Chinook salmon guideline harvest of 520 fish and a guideline harvest of 12,000 Tahltan sockeye salmon. Of the several run size estimates generated to date, ranging from 113,000 to 187,000 sockeye salmon, it was decided to use last week's model run using the test fish data which indicted a run size of 173,300 sockeye salmon. This decision was made principally on the uncertainties around and the effects of the extra seven nets fishing, as well as, the suspicion that the exploitation rate under the current extreme low flow regimes was causing the model to overestimate the run size. The day one harvest of 4,174 sockeye salmon, including a harvest of approximately 2,700 Tahltan sockeye salmon prompted a one day extension. This decision was aided by both the near record CPUE in District 108 last week and the record incidental catches of sockeye salmon caught in the Chinook salmon tagging project located 20km downstream from the fishery. A run size estimate was generated during the third day of the fishery. This estimate indicated that there was room to extend for a minimum of one more day. An extension was granted. The five day fishery yielded a harvest of 720 large Chinook (32 released), 388 nonlarge Chinook and 18,564 sockeye salmon, including a harvest of 12,323 Tahltan Lake sockeye salmon. The Chinook salmon harvest was above the guideline harvest of 520 fish; the harvest of Tahltan sockeye salmon was close to target. The total weekly sockeye salmon harvest was comprised of 22% Tahltan enhanced, 44% Tahltan wild, 27% Tuya, and 6% mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 143 fish; the average was 124 fish. SW 28 marks the historical peak of the Tahltan run through the fishery. It was suspected at this juncture of the fishery that the Tahltan run was lower than expected based on the preseason estimate. The preliminary U.S. harvest estimates for this week indicated the CPUE was below average. The upper river Aboriginal fishery harvests were reported as being fair. It was suspected that the due to low water conditions the sockeye salmon would arrive at the Aboriginal fishing site earlier than normal. The Chinook salmon harvests in upper Stikine fishery continue to be below the seasonal average. The Little Tahltan weir count of 149 fish continued to lag well behind the average of 2,198 large Chinook salmon. The upper Stikine recreational fishery harvests were reported as being poor.

In SW 29 (10–16 July) the fishery was posted for an initial two day opening with a guideline harvest of 4,600 Tahltan sockeye salmon. Based a regression using both test and commercial CPUE data the inriver run size was estimated at 162,000 sockeye salmon, including 89,500 Tahltan sockeye salmon. The day one harvest was 2,473 sockeye salmon, including a harvest of approximately 1,200 Tahltan sockeye salmon. The projected two day harvest was estimated at 2,400 Tahltan Lake sockeye salmon, well below the guideline harvest of 4,600 fish. The below average CPUE on Tahltan Lake sockeye salmon under extremely good fishing conditions was the deciding factor in not extending this week's fishery. The two day fishery yielded a harvest of 114 large Chinook (0 released), 58 nonlarge Chinook and 4,931 sockeye salmon. The Tahltan sockeye salmon harvest of 2,385 fish was below the guideline harvest of 4,600 fish. The total weekly sockeye salmon harvest was comprised of 21% Tahltan enhanced, 28% Tahltan wild, 29% Tuya, and 23% mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 70 fish; the average was 91 fish. SW 29 marked the end of the Tahltan Lake sockeye salmon management regime. The balance of the sockeye salmon fishery decisions for the lower commercial fishery was driven by mainstem sockeye salmon abundance and TAC. The upper river Aboriginal harvests were 28% above average. The Tahltan weir count of 15,000 fish eclipsed the average count of 2,000 sockeye salmon. For the third consecutive year the fish entered the lake unusually early. Their early entry was attributed to the low flow conditions (record lows in some days) that provided for ease of migration. The Little Tahltan weir count of 149 fish continued to lag below the average of 2,198 large Chinook salmon. The upper Stikine recreational fishery harvests were poor.

In SW 30 (17–23 July) the fishery was posted for an initial two day opening with a guideline harvest of 3,455 mainstem sockeye salmon. The terminal run size estimate was 175,800 based on the average of the SMM and an inriver run size regression using test and commercial CPUE. The estimated run size of mainstem sockeye salmon was 55,700 fish. The day one harvest of 2,758 sockeye salmon, including a harvest of approximately 1,260 mainstem sockeye salmon, triggered a one day extension. In was projected that the mainstem guideline harvest would be exceeded this week. The three day fishery yielded a harvest of 68 large Chinook (3 released), 35 nonlarge Chinook and 6,679 sockeye salmon, including a mainstem sockeye salmon harvest of 3,096 fish. The mainstem harvest was under the weekly guideline harvest of 3,455 sockeye salmon. The total weekly sockeye salmon harvest was comprised of 15% Tahltan enhanced, 19% Tahltan wild, 20% Tuya, and 45% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 56 fish; the average was 62 fish. The upper river Aboriginal harvests remained strong. The Tahltan weir count remained high with a projected total weir count of 39,000 fish. Harvests taken in the Aboriginal fishery remained above average this week. The Little Tahltan weir count of 814 fish continued to lag well the average of 3,600 large Chinook salmon. Again in 2011 the Tahltan River was surveyed to determine if the migrant Chinook salmon were holding along its length. Very few Chinook salmon were observed. There were no obvious signs of barriers that impeded their migration. The Chinook salmon recreational fishery was close to completion; very poor success reported. The U.S. rescinded the liberalization of their sport fishery this week, thus reduces the daily creel and amount of gear permitted.

In SW 31 (24–30 July) the fishery was posted for an initial two day opening with a guideline harvest of 2,600 mainstem sockeye salmon. The inriver run size projection increased to 183,900 sockeye salmon based on an inriver commercial CPUE regression and an inriver test fishery CPUE regression. The mainstem projection was 55,400 mainstem sockeye salmon. The day one harvest of 1,635 sockeye salmon, including a harvest of approximately 1,226 mainstem sockeye salmon, did not trigger an extension. The two day fishery yielded a harvest of 16 large Chinook (0 released), 5 nonlarge Chinook, and 3,341 sockeye salmon, including a mainstem sockeye salmon harvest of 2,753 fish, close to the guideline harvest by 2,600 fish. The total weekly sockeye salmon harvest was comprised of 6% Tahltan enhanced, 12% Tahltan wild, 7% Tuya, and 75% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 70 fish; the average was 61 fish. The upper river Aboriginal effort dropped substantially; however, harvests remained relatively strong. The Tahltan weir count remained strong. The projected escapement based on an early running timing was 34,700 fish.

In SW 32 (31 July–06 August) the fishery was posted for an initial two day opening with a guideline harvest of 3,839 mainstem sockeye salmon. The TAC was based on a run size projection of 187,720 fish generated from inriver regression models (test and commercial), the SMM (commercial), and a projected run reconstruction exercise based on the Tahltan Lake escapement and inriver harvest. The projected mainstem sockeye salmon run size was 60,100 fish. The day one harvest of 1,698 sockeye salmon, including a harvest of approximately 1,449 mainstem sockeye salmon, triggered a one day extension. The three day fishery yielded a harvest of 5 large Chinook, 1 nonlarge Chinook, 31 coho, 1 chum, and 4,178 sockeye salmon, including a mainstem sockeye salmon harvest of 3,565 fish; close to the guideline harvest by 3,839 fish. The total weekly sockeye salmon harvest was comprised of 4% Tahltan enhanced, 6% Tahltan wild, 5% Tuya, and 85% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 63 fish; the average was 50 fish. The upper river Aboriginal effort continued to drop. The Tahltan weir count to date was 30,668 fish; the projected escapement based on an early run timing scenario was 34,118 fish.

In SW 33 (7–13 August) the fishery was posted for an initial two day opening with a guideline harvest of 2,075 mainstem sockeye salmon. The TAC was based on a run size projection of 195,070 fish; generated from inriver regression models (test and commercial) and a Tahltan based run reconstruction exercise. The projected mainstem sockeye salmon run size was 65,600 fish. The day one harvest of 917 sockeye salmon, including a harvest of approximately 800 mainstem sockeye salmon and a projected two day catch of 1,600 mainstem sockeye salmon did not trigger an extension. This week's two day fishery yielded a harvest of 3 large Chinook, 1 nonlarge Chinook, 339 coho, 24 chum, and 1,642 sockeye salmon, including a mainstem sockeye salmon harvest of 1,430 fish which was below the guideline catch by 2,075 fish. The total weekly sockeye salmon harvest was comprised of 3% Tahltan enhanced, 6% Tahltan wild, 4% Tuya, and 87% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 40 fish; the average was 34 fish. Few nets remained fishing in the upper river Aboriginal fishery this week. The Tahltan weir count to date was 32,941 fish and the projected escapement based on an early run timing scenario remained at 34,000 sockeye salmon.

In SW 34 (14–20 August) the fishery was posted for an initial two day opening. The run projection was 200,020 fish, including 67,352 mainstem sockeye salmon. The total projection was the average of a run reconstruction estimate for the Tahltan component (accounting of the Tahltan stock was considered near completion) and the inriver test and commercial model projections. The day one harvest of 252 sockeye salmon, including approximately 227 mainstem sockeye salmon and a projected two day harvest of 452 mainstem sockeye salmon triggered a one day extension. This week's three day fishery yielded a harvest of 2 large Chinook, 637 coho, 50 chum, 3 pink, and 482 sockeye salmon, including 434 mainstem fish. The total weekly sockeye salmon harvest was comprised of 0% Tahltan enhanced, 10% Tahltan wild, 0% Tuya, and 90% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 10 fish, the same as the average. Two nets fished the Aboriginal fishery this week. The Tahltan weir count to date was 33,374 fish. The Little Tahltan weir project was completed with a preliminary count of 1,754 large and 221 nonlarge Chinook salmon.

In SW 35 (21–27 August) the fishery was opened for an initial three day period with dual management objectives focused on both coho and sockeye salmon. On average 97% of the sockeye salmon run has exited the fishery by this week. The projected sockeye salmon run remained at 200,020 fish, including a mainstem component of 67,400 sockeye salmon. The guideline harvest for this stock group was less than 1,100 fish. The guideline harvest on coho salmon was 5,000 fish for the season. High water (flood) conditions during the first two days of the fishery resulted in little effort and only minor catches. In light of low effort and harvest due to the fishing conditions, the fishery was extended for four days for a total of seven days this week. The seven day fishery yielded a harvest of 616 coho, 4 chum, and 102 sockeye salmon, all of which were mainstem fish.

In SW 36–37 (28 August–10 September) the fishery was opened for an initial three day period. The management goal was to harvest the 5,000 quota allotted under the terms of the PST. After two days of fishing and a harvest of 670 coho and 40 sockeye salmon, the fishery was extended one day. The harvest after three days of fishing indicated that there was room for another two day extension for a total of seven days for SW 36. The cumulative coho salmon harvest was 4,322 leaving a TAC balance of less than 700 fish. SW 37 was opened for two days to harvest the remaining balance. The fishery yielded at harvest of 381 fish. The final day of fishing was 05 September. The final coho salmon harvest was 5,718 fish, 1,015 of which were taken in the course of the sockeye salmon fishery and, therefore, not counted toward the 5,000 fish allocation.

Upper Stikine River Commercial Fishery

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. A total of 972 sockeye salmon was harvest in 2011, which was above the average of 834 fish. The total nonlarge Chinook salmon harvest of 14 fish was close to average. Only 2 large Chinook salmon were harvested, below the average harvest of 14 fish. The fishing effort of 12 boat days fished was near the average of 13 boat days. Generally, fishery openings were based on the lower Stikine commercial fishery openings, lagged one week. The first opening, however, was concurrent with the lower fishery opening.

Aboriginal Fishery

The Stikine River Aboriginal fishery, which is located near Telegraph Creek, B.C., harvested 515 large Chinook, 218 nonlarge Chinook, and 6,893 sockeye salmon. The harvest of large Chinook salmon was 32% below average, while the harvest of sockeye salmon was 25% above average. The harvest of nonlarge Chinook salmon was 10% below average. As in 2009 and 2010, the sockeye salmon run timing to the fishing grounds was earlier than normal. The fishing conditions were very good throughout the course of the fishery which extended from SW 23-34 (29-June to 20 August).

Recreational Fishery

The Stikine River salmon recreational fishery targets primarily Chinook salmon and its principal fishing location is located at the mouth of the Tahltan River. Minor sport fishing activities occur in upper reaches of the Tahltan River and in some tributaries of the Iskut River, including Verrett and Craig rivers. In 2011 the catch estimate was 53 large Chinook salmon, all of which were taken in the Telegraph Creek area. The fishing success was reported as very poor throughout the course of the Chinook salmon run.

Escapement

Sockeye Salmon

The total of 34,588 sockeye salmon counted through the Tahltan Lake weir in 2011 was above the average of 33,000 fish. The 2011 count was above the escapement point estimate of 24,000 and above the upper end of the escapement goal range of 18,000 to 30,000 fish. An estimated 10,248 fish (35% of escapement) originated from the fry-stocking program which is below the 38% contribution of smolt observed in 2008, the principal cycle year contributing to the 2011 run. A total of 340 sockeye salmon were sacrificed at the weir for stock composition analysis. In addition, a total of 4,559 sockeye salmon were collected for broodstock, resulting in a spawning escapement of 29,689 sockeye salmon in Tahltan Lake.

The spawning escapements for the mainstem and Tuya stock groups are calculated using stock ID, test fishery and inriver commercial harvest data. Based on this run reconstruction approach, the escapement estimates are 29,393 mainstem and 13,953 Tuya sockeye salmon. The mainstem spawning escapement is near average and within the escapement goal range of 20,000 to 40,000 fish. Aerial surveys were not conducted due to budget constraints in 2011. It appears that advancing the management of mainstem sockeye salmon date one week starting on SW 30 (17–23 July) succeeded in improving the escapement.

The existence of stocked Tuya escapement continues to be a concern because of straying of this stock to other Stikine River tributaries. Furthermore, the injury to Tuya River sockeye salmon attempting to ascend the lower reaches of the Tuya River is evident based on reports from First Nations fishers and stock assessment personnel. A study on the behavior of Tuya river sockeye salmon strays in 2004 and 2005 concluded that straying of Tuya River sockeye salmon does not pose a short term genetic risk to natural mainstem Stikine River sockeye salmon. However, over the long term, given enough straying, an interaction/spawning of Tuya strays with natural sockeye salmon may occur. To address problems associated with fish capture in the lower Tuya River; a fishway/trapping apparatus was constructed during the spring of 2006. Unfortunately the Tuya fish trapping project was not prosecuted because of a major rockslide at the Tuya River fishing site that occurred sometime in June 2006. The rockslide rendered the fishing site, for which the fish trap was groomed for, unusable due to changes and river hydrology as well as the unsafe working conditions at the site. More rockslide activity occurred in May and June 2007 and 2008.

A steering committee, consisting of Canadian and U.S. engineers and others visited the site in August 2007 to assess the conditions and to consider and discuss other fish capture options. The steering committee decided to proceed with a blasting plan so designed to provide fish passage around the newly formed barrier. The project was first attempted in March 2008, but was aborted due dangerous working conditions and an abnormal amount of ice at the blasting site. In late October and early November 2008 the project proceeded and succeeded to remove approximately 120 m^3 of rock from the slide area.

For the third consecutive year since the barrier was removed a field visit was conducted to assess the success of the 2008 blasting and to collect baseline biological samples from Tuya River sockeye salmon. On the 20 July, while en route to camp, an aerial survey was conducted. Although the viewing conditions were somewhat impaired due to the murky nature of the flow, sockeye salmon were observed above the blast site; no fish were observed below the blast site. In past aerial surveys conducted after the 2006 rockslide no fish were observed above the rockslide while many fish (schools) were observed below. It should be noted that these aerial surveys, as in past years, were victim of poor viewing conditions and the fish observed were in large schools that the surveyor could only identify as such. Nonetheless, the contrast with fish distribution in 2006–2008 compared to fish distribution in 2011 was evident. In addition to the aerial survey, set gillnets were fished above and below the blast site. Sockeye, Chinook, and pink salmon were caught at both sites. The set net site located below the blast site, however, had the highest catch, which was probably due to the quality of set net site in that it was set in a natural holding area below the blast site. The number of salmon breaches and the number of successful attempts were recorded over a 60 minute period per day, from 19–23 July. Overall, very few fish were observed attempting to negotiate the blast site, n<10. The observations therefore were of little utility. In 2010, however, a total 468 breaches observed, 80 fish or 17.1% succeeded in ascending the river. The 2009 study showed that only 7% of the fish succeeded negotiating the chute 87% of the breaches and 17% of the successes occurred at river right section of the flow. This is the site of the original channel before the 2008 blasting project diverted a large measure of flow to river left. The attraction of this site (river right) is probably due to the 2–3 m vertical falls and plunge pool located there. The balance of the flow was located at the blast site. In light of the observation articulate above, and in concert with the 2009 study, it is reasonable to conclude that the 2008 blasting project succeeded in its objective which was to provide fish passage around the barrier that slid into the river in July 2006.

Work continues in the development of a weir/fish trap combination compatible with the Tuya River flow regime. A template model from a fence located in the Docee River, B.C. is being considered. An initial routing for a tote road scouted in May 2009 was surveyed by DFO surveyors in late August 2010. The final drawings will be used to estimate the cost of constructing a tote road to the new proposed fishing site. Permitting requirements, including community meeting(s) have yet to be addressed. The work continues on drafting plans and estimating the cost of both the weir/trap structure and the access road in 2011.

The fourth year of an experimental test fishery designed to harvest Tuya River sockeye salmon at a site on the mainstem Stikine located between the mouths of the Tahltan and Tuya rivers was conducted from 21 to 29 July. The total harvest from the test fishery was 2,878 sockeye, 13 large Chinook, and 6 nonlarge Chinook salmon. Otolith analyses indicate that 1,634 fish (57%) were Tuya origin sockeye salmon. The balance of the harvest consisted of Tahltan enhanced (13%), Tahltan wild (21%) and mainstem sockeye salmon (9%). It should be noted that the fishing conditions are very challenging due to high river velocities. It is highly recommended that fishing at this test fish site be limited to persons with extensive experience in both net fishing and river navigation.

Chinook Salmon

The 2011 Chinook salmon escapement enumerated at the Little Tahltan weir was 1,753 large fish and 194 nonlarge Chinook salmon. The escapement of large Chinook salmon in the Little Tahltan River was 70% below the average of 5,785 fish and 47% below the

Canadian escapement target for this stock of 3,300 large Chinook salmon. The weir count was also well below the low end of the Canadian escapement goal range of 2,700 to 5,300 large fish. This is the fifth consecutive year that the lower end of the escapement was not reached. The nonlarge Chinook salmon count was 10% below the average count of 215 fish.

A MR study was conducted again in 2011 concurrent with the SCMM to assess the inriver Chinook salmon abundance. Inseason MR estimates were calculated weekly post SW 22 (22-May to 07-July). The postseason estimate of Stikine River spawning escapement based on tag recoveries in the commercial fishery and spawning ground recoveries was 14,482 large Chinook salmon; 51% below the average escapement of 29,298. The escapement was 15% below the escapement point goal of 17,400 large Chinook salmon, but within the escapement goal range of 14,000 to 28,000 fish. The escapement to the Little Tahltan River represented approximately 12% of the total Stikine River escapement. The percentage is below average.

Verrett Creek escapements counts were judged as moderate, better than what was observed in 2007–2010, as reported by the carcass pitch crew stationed at the creek from 03-11 August. The Verrett Creek project is primarily a study to collect spaghetti tags; not to assess escapement numbers. An above average run of Shakes Creek Chinook salmon was also reported by residents living at the creek mouth.

Coho Salmon

Aerial surveys of five index sites were conducted on 04 November. The combined count of 2,542 coho salmon, under fair to good viewing conditions, was 35% below the average of 3,910 coho salmon. All six indices were below average. There was a poor showing of spawners in the Craig River. The average counts from these three sites are 1,100 fish, while this year's count was 459 fish.

A coho salmon drift gillnet test fishery was conducted from 04 Sept to 11 October 2011. The total harvest was 186 coho, 7 pink, 5 chum, and 18 steelhead trout was taken in 392 drift fishing events. Each event was 10–15 minutes in length. Net dimension were constant at 33 m, 150cm mesh, by 30 meshes deep. The total cumulative weekly CPUE was 4.6 fish; the year average was 6.1 fish. It should be noted that the fishing in 2011 conditions impaired due to two major flooding events that occurred in September. This test fishery has been operated a various levels of vigour since 1986 through to 2010. (Funding in 2007 was not granted.)

Sockeye Salmon Run Reconstruction

The postseason estimate of the terminal Stikine River sockeye salmon terminal run size is 213,399 fish. Of this number, approximately 102,706 were of Tahltan Lake origin (wild & stocked), 45,921 were of Tuya origin (fry from Tahltan broodstock stocked into Tuya Lake), and 64,771 were mainstem stocks (Table 3). These estimates are based on postseason data including: otolith recovery and GSI analysis in the U.S. Districts 106 and 108 harvests; otolith analysis, egg diameter stock-composition estimates for inriver catches from the Canadian commercial, Aboriginal, ESSR, and test fishery harvests; and escapement data. The 2011 terminal run was above average and above the preseason forecast of 183,000 fish.

TAKU RIVER

Taku River salmon are harvested in the U.S. gillnet fishery in Alaskan District 111, in the northern Southeast Alaska seine and troll fisheries, in the Juneau area sport fishery, and in the inriver personal use fishery. Canadian fisheries for Taku River salmon include a commercial gillnet fishery located in the river near the Canada/U.S. border, an AF, and a sport fishery (Figure 2).

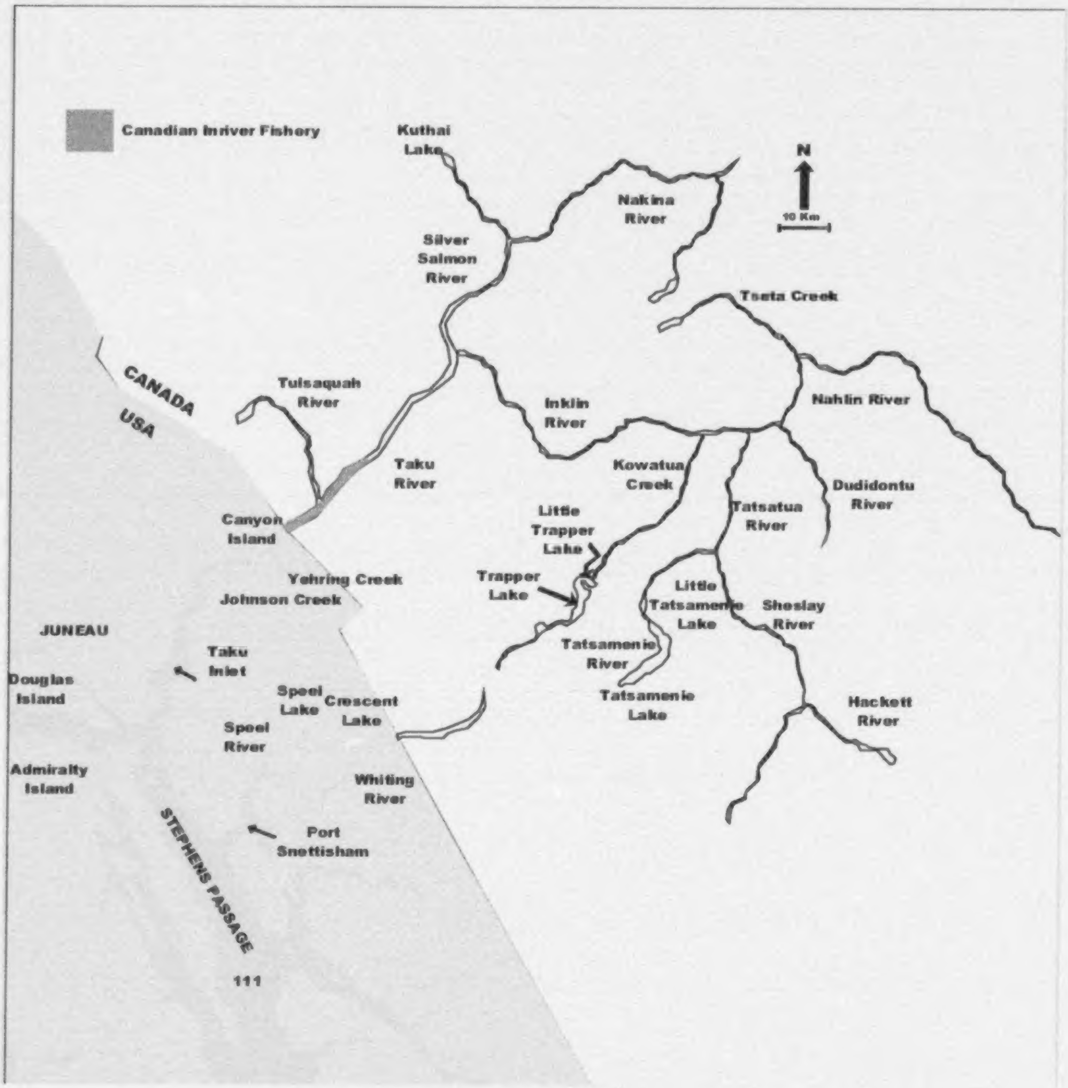
Canadian Inriver Fishery
Kuthai Lake
N
10 Km
Nakina River
Silver Salmon River
Tseta Creek
CANADA
USA
Tulsequah River
Inklin River
Nahlin River
Taku River
Kowatua Creek
Dudidontu River
Canyon Island
Little Trapper Lake
Tatsatua River
Trapper Lake
Yehring Creek
Johnson Creek
Little Tatsamenie Lake
Sheslay River
JUNEAU
Taku Inlet
Tatsamenie River
Douglas Island
Speel Lake
Crescent Lake
Tatsamenie Lake
Hackett River
Speel River
Admiralty Island
Whiting River
Port Snettisham
STEPHENS PASSAGE
111

Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

Harvest Regulations

Fishing arrangements in place as a result of Annex IV, Chapter 1 of the PST can be found at: http://www.psc.org/pubs/treaty.pdf. For salmon originating in the Canadian portion of the Taku River watershed, these arrangements include the continuation of directed fisheries for Taku River Chinook salmon stocks, first implemented in 2005; continuation of coho salmon harvest shares; and a sockeye salmon harvest sharing arrangement based on the production of enhanced fish.

U.S. Fisheries

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 46 days from June 19 through September 28, 2011. The harvest totaled 2,438 Chinook, 100,400 sockeye, 27,563 coho, 338,657 pink, and 667,709 chum salmon. Harvests of pink and chum salmon were above average, and the harvests of Chinook, sockeye, and coho salmon were below average.

Hatchery stocks contributed substantially to the numbers of both sockeye and chum salmon harvested and minor numbers to the harvest of other species. The 2011 season was the twelfth year of substantial numbers of adult sockeye salmon returning to the Snettisham Hatchery inside Port Snettisham. The Speel Arm SHA inside Port Snettisham was opened to common property fishing during SW 34 through 37 to target Port Snettisham hatchery sockeye salmon.

A bilateral review of the escapement goal for Taku large Chinook salmon completed in early 2009 resulted in a revised escapement goal range of 19,000 to 36,000 fish. The revised escapement goal and the 2011 preseason terminal run estimate of 40,986 Taku large Chinook salmon allowed for directed District 111 Chinook salmon fisheries in 2011. However, when portioned over the run timing, the allowed harvest was deemed too small to provide for manageable commercial fisheries. The first and all subsequent inseason estimates of Chinook salmon run strength were substantially less than the preseason forecast providing no AC. As a result, the U.S. did not prosecute any directed commercial Chinook salmon fisheries in 2011, but existing regulations did liberalize the District 111 sport fishery based on the preseason forecast. The total 2011 traditional District 111 drift gillnet harvest of large Taku River Chinook salmon was 518 fish. The Taku River stock assessment program at Canyon Island provided data to estimate the above border Chinook salmon run. This data, along with the spawning ground MR data was used to generate a final escapement estimate of 27,523 large Taku River Chinook salmon.

The preseason terminal run forecast of 40,986 large Taku River Chinook salmon allowed for directed District 111 Chinook salmon fisheries in beginning the first Monday in May in SW 19. In addition to the 3,500 fish BLC to be shared amongst the sport, troll, and drift gillnet fisheries, the U.S. AC was 1,533 fish. Due to the limited Chinook salmon AC, the first possible opening of the directed gillnet season was postponed until the first inseason estimate of run strength was generated. Because the preseason forecast provided for directed U.S. Chinook salmon fisheries, regulations liberalized sport fishing bag limits and gear restrictions in District 111 between April 25 and June 21. The first inseason estimate of abundance was generated in SW 21 and was below a level that provided any allowed harvest for directed U.S. fisheries. All subsequent inseason estimates did not provide allowed harvest, and as a result, the U.S. did not prosecute any directed commercial Chinook salmon fisheries in 2011. The sport harvest of 573 Taku large fish plus the 763 Taku large fish incidentally harvested in the District 111 sockeye salmon gillnet fisheries through SW 28 was well below the BLC of 3,500 fish provided by the PST.

The traditional District 111 sockeye salmon harvest was 100,400 fish and was below average. Weekly sockeye salmon harvests were below average during all weeks in 2011 with the exception of SW 29, and sockeye salmon CPUE was below average during all weeks. Domestic hatchery sockeye salmon stocks began to contribute to the traditional fishery in SW 27 and added substantial numbers to the harvests in SW 30–34. Of the total traditional District 111 sockeye salmon harvest, 21% occurred in Stephens Passage, less than the average of 29%. This reduction is primarily due to conservation measures taken for wild Port Snettisham sockeye salmon stocks, including a six inch minimum mesh restriction imposed in SW 28 through 32. The contributions of wild Taku River and Port Snettisham sockeye salmon to the traditional District 111 harvest was based on postseason analyses of SPA and otolith analysis. Sockeye salmon from a joint U.S./Canada fry-stocking program at Tatsamenie and Trapper lakes contributed an estimated 5,604 fish to the fishery (5.3% of the harvest; Table 4). Contributions of U.S. hatchery sockeye salmon to the traditional District 111 drift gillnet fishery totaled 24,595 fish or 27% of the harvest. These were predominately Port Snettisham hatchery sockeye salmon but also included a small number of thermally marked fish from a fry-stocking program at Sweetheart Lake in Port Snettisham. Historical stock composition estimates were applied to the remainder of the harvest to estimate contributions of Taku River and Port Snettisham wild stocks to the weekly harvests. The estimate of stock composition of the harvest of wild Taku sockeye salmon in the traditional district was 65,089 (65%) fish. Once the minimum of the escapement goal range to Speel Lake was achieved, Port Snettisham and the Speel Arm SHA were opened for one day in SW34 and concurrently with the traditional fishery in SW 35 through 37.

Table 4. Taku sockeye salmon run reconstruction, 2011. Estimates do not include spawning escapements below the U.S./Canada border.

	Taku			Snettisham Stocks		
	Total	Wild	Enhanced	Total	Wild	Enhanced
Escapement	115,383	113,022	2,362			
Canadian Harvest						
Commercial	23,898	22,145	1,753			
Food Fishery	124	114	10			
Total	24,022	22,259	1,762			
Test Fishery harvest	521	480	41			
Above Border Run	139,926	135,761	4,165			
U.S. Harvest [a]						
District 111	70,693	65,089	5,604	29,068	4,473	24,595
Personal Use	1,111	1,024	87			
Total	71,804	66,113	5,691			
Test Fishery harvest	0					
Terminal Run	211,730	201,874	9,856			

		Total	Wild
	Terminal Run	211,730	201,874
	Escapement Goal	75,000	75,000
	AC	136,730	126,874
Canada			
	Harvest Share	21%	21%
	Base Allowable	28,713	26,644
	Surplus Allowable	0	0
	Canada AC	28,713	26,644
	Actual harvest	24,022	22,259
U.S.			
	Harvest Share	79%	79%
	US AC	108,017	100,230
	Actual harvest	71,804	66,113

[a] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

Coho salmon stocks harvested in District 111 include runs to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams as well as Alaskan hatcheries. The traditional District 111 coho salmon harvest of 27,563 fish was 74% of the average of 37,006 fish. CWT analyses indicate Alaskan hatchery coho salmon contributed 2,088 fish or 8% of the traditional District 111 harvest.

Management emphasis for the District 111 drift gillnet fishery shifted to sockeye salmon beginning in SW 26. Management actions to conduct the Taku River directed sockeye salmon drift gillnet fishery were limited to imposing restrictions in time, area, and gear. Because there is no bilaterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery is based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progresses sufficient data is acquired to estimate the inriver run size from the MR program at Canyon Island and to use that estimate in conjunction with migratory timing and historical fishery harvest data to forecast the entire Taku sockeye salmon run. In the first week of sockeye salmon management, SW 26 (starting June 19), Section 11-B was open for 2 days with the north line pulled back to the latitude of Jaw Point to conserve for Chinook salmon. A total of 43 boats harvested 652 Chinook salmon of which 294 were large Taku fish. The sockeye salmon harvest was 34% and CPUE was 86% of the average.

In SW 27, Section 11-B was opened for three days, with the Jaw Point line as a Chinook salmon conservation measure. A total of 52 boats harvested 725 Chinook salmon, 301 large Taku fish. The sockeye salmon harvest was 43% of average and the sockeye salmon CPUE was 86% of average. The first weekly sockeye salmon inriver run estimate projected an inriver run of 140,054 sockeye salmon, 104% of average (Table 5).

Table 5. Weekly U.S. inseason forecasts of terminal run size, TAC, inriver run size, and the U.S. harvest of wild Taku River sockeye salmon for 2011.

Stat Week	Inriver Run	Terminal Run[a]	Total TAC	U.S. TAC	Projected U.S. Catch
27	140,691	171,672	96,672	77,338	30,982
28	94,684	129,226	54,226	41,754	34,542
29	105,043	153,857	78,857	62,297	48,814
30	114,223	161,558	86,558	66,650	47,335
31	123,060	172,786	97,786	73,340	49,727
32	120,108	183,970	108,970	81,727	63,862
33	122,631	187,659	112,659	86,747	65,028

[a] Terminal run does not include any marine harvest of Taku River salmon that might occur outside of District 111.

Fishing time for SW 28 was set for three days in Section 11-B with the Jaw Point line for Chinook salmon conservation. There was a six-inch minimum mesh restriction south of Circle Point for Port Snettisham wild sockeye salmon conservation while providing fishing opportunity on enhanced summer chum salmon. Limestone Inlet was opened concurrent with Stephens Passage to provide access to enhanced DIPAC chum salmon returning to this remote release site. Effort increased to 75 boats and 205 Chinook salmon were harvested; 168 of which were large Taku fish. The total gillnet harvest of large Taku River Chinook salmon for the directed Chinook salmon fishery accounting period, SW 26–28, was 763 fish. Sockeye salmon harvest was 58% of average and CPUE was 86%

of average. The weekly estimate declined, projecting an inriver run of 109,000 sockeye salmon.

Fishing time for SW 29 was three days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point, to conserve for wild Port Snettisham sockeye salmon, while providing opportunity on enhanced summer chum salmon. Section 11-C was opened for three days due to adequate pink salmon runs to mainland systems. Effort increased to the 2011 maximum of 160 boats with sockeye salmon harvest 101% of average and CPUE 73% of average. Analysis of otoliths revealed that 4% of the sockeye salmon harvested from Taku Inlet during this week were DIPAC Snettisham Hatchery origin. In Taku Inlet, TBR enhanced sockeye salmon of Tatsamenie and Trapper lakes origin contributed 7% and 5% respectively to the harvest. In Stephens Passage, 17% of the sockeye salmon harvest was of DIPAC Snettisham Hatchery origin, and TBR enhanced sockeye salmon of Tatsamenie Lake origin contributed 1%. The weekly estimate projected an inriver run of 105,631 sockeye salmon.

Fishing time for SW 30 was set for two days in Taku Inlet and Stephens Passage; with a six-inch minimum mesh restriction south of Circle Point for Port Snettisham wild sockeye salmon conservation while providing fishing opportunity on enhanced summer chum salmon. Section 11-C was opened for two days. Initial effort remained steady at 155 boats, but quickly dropped with poor catches. Sockeye salmon harvest was 48% of average and CPUE dropped to 38% of average. Otolith analysis revealed that 18% of enhanced fish from Taku Inlet were of DIPAC Snettisham Hatchery origin. TBR enhanced Tatsamenie and Trapper lakes origin sockeye salmon contributed 9% and 2% respectively to Taku Inlet harvests. The weekly sockeye salmon estimate increased, projecting an inriver run of 138,318 fish.

Fishing time for SW 31 was set for three days in Taku Inlet and Stephens Passage; with a six-inch minimum mesh restriction south of Circle Point for Port Snettisham wild sockeye salmon conservation while providing fishing opportunity on enhanced summer chum salmon. With good inriver indicators including an inriver run estimate indicating the minimum of the escapement goal range was in the river past all fisheries, the fishery was extended an additional day. Section 11-C was opened for four days due to adequate pink salmon runs to mainland systems. Effort declined to 124 boats; sockeye salmon harvest was 71% of average and CPUE was 59% of average. Otolith analysis revealed that 23% of the sockeye salmon harvested from Taku Inlet during this week was of DIPAC Snettisham Hatchery origin. TBR enhanced Tatsamenie and Trapper lakes origin sockeye salmon contributed 8% and 1% respectively. The weekly sockeye salmon estimate projected an inriver run of 112,128 fish.

Fishing time for SW 32 was set for three days in Taku Inlet and Stephens Passage with a six-inch minimum mesh restriction south of Circle Point for Port Snettisham wild sockeye salmon conservation while providing fishing opportunity on enhanced summer chum salmon. Section 11-C was opened for four days due to adequate pink salmon runs to mainland systems. With good inriver indicators and no conservation concerns, Section

11-B was extended an additional day. Effort declined to 87 boats, and sockeye salmon harvest was 85% and CPUE was 92% of average. Otolith analysis indicated that 25% of the sockeye salmon harvested from Taku Inlet was of DIPAC Snettisham Hatchery origin. TBR enhanced Tatsamenie and Trapper lakes origin sockeye salmon contributed 3% and 0.2% respectively. In Stephens Passage, 75% of the sockeye salmon harvest was DIPAC Snettisham Hatchery origin. The weekly sockeye salmon estimate projected an inriver run of 129,706 fish.

Fishing time for SW 33 was set for four days in Taku Inlet and Stephens Passage, with the six-inch minimum mesh restriction south of Circle Point repealed due to a strong movement of fish through the Speel Lake weir. Section 11-C was opened for four days due to adequate pink salmon runs to mainland systems. Effort increased to 100 boats and the sockeye salmon harvest was 92% of average and CPUE was 77% of average. Otolith analysis indicated 29% of the enhanced fish harvested from Taku Inlet was of DIPAC Snettisham Hatchery origin. TBR enhanced Tatsamenie and Trapper lakes origin sockeye salmon contributed 2% and 0.3% respectively. In Stephens Passage, 83% of the sockeye salmon harvest was DIPAC Snettisham Hatchery origin. The weekly sockeye salmon estimate projected an escapement of 111,000 fish.

The fall drift gillnet season in District 111 lasted seven weeks, beginning on August 15 in SW 34 and ending September 28 in SW 40. During this time management focus switches from sockeye to coho salmon abundance. Fishing time in Section 11-B during SW 34 was set at the average three days due to adequate inseason sockeye salmon estimates and strong early coho salmon performance. The opening was delayed until Monday, August 15 to accommodate the Golden North Salmon Derby taking place in Juneau area waters. Section 11-C was opened for three days due to adequate pink salmon runs to mainland systems. The minimum escapement to Speel Lake was achieved, and a 24-hour fishery beginning noon, Wednesday in the Speel Arm SHA. Nearly the entire District 111 fleet had moved into Speel Arm by Tuesday afternoon. A total of 37 boats reported landings in the traditional fishery area this week. The coho salmon harvest was 35% and the CPUE was 47% of average. In addition to poor coho salmon CPUE, a substantial reduction in average size of the fish was noted by the fleet. In the 24-hour Speel Arm SHA fishery, 77 boats harvested 61,000 sockeye salmon. Otolith samples of sockeye salmon obtained and analyzed by DIPAC indicated 97% of the samples were of Snettisham Hatchery origin.

Fishing times in Sections 11-B and 11-C were set for three days in SW 35. An above average 63 boats fished; coho salmon harvest was 70% of average and CPUE was 49% of average. The Speel Arm SHA was opened for three days to target Snettisham Hatchery enhanced sockeye salmon, and 25 boats harvested 750 sockeye salmon. The inseason coho salmon estimate projected an inriver run of 89,000 fish, which was less than the preseason forecast of 100,000 coho salmon.

Fishing times in Section 11-B, 11-C, and the Speel Arm SHA were set for the average three days in SW 36. An above average 53 boats fished; coho salmon harvest was 59% of average and CPUE was 46% of average. In the Speel Arm SHA, six boats harvested 1,400 sockeye salmon. No inseason coho salmon estimate was generated in SW 36.

Fishing times in Section 11-B and the Speel Arm SHA were set at below average three days in SW 37. This was based on SW 36 Canyon Island fish wheel catches that were about 80% of average and a near record harvest in the Canadian inriver fishery. In the marine fishery an average 30 boats fished; coho salmon harvest was 17% of average and CPUE was 22% of average. In the Speel Arm SHA, three boats harvested 160 sockeye salmon. The inseason coho salmon estimate projected an inriver run of 50,000 fish, a substantial decline from the previous estimate.

Fishing time in Section 11-B was set for two days in SW 38. An above average 26 boats fished; coho salmon harvest was 48% of average and CPUE was 91% of average. The inseason coho salmon estimate improved, projecting an inriver run of 63,700 fish and indicating the PST minimum above border run of 38,000 coho salmon had been achieved.

For the remaining two weeks of the season, Section 11-B was open for a below average three days each week. Coho salmon harvest was 35% of average and CPUE was 55% of average. The final inseason coho salmon estimate projected an inriver run of 69,000 fish and an escapement past all fisheries of 55,000 fish. The traditional District 111 sockeye salmon harvest for SW 34–40 was 44% of average.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2011. Personal use permits were used to harvest an estimated 1,100 Taku River sockeye salmon. An estimated 2,200 Chinook salmon were harvested by sport fisheries in the Juneau area during the directed fisheries period. A number of stocks are known to contribute to the Juneau area sport fishery, including those from the Taku, Chilkat, and King Salmon rivers, and local hatchery stocks, but the major contributor of wild large fish was believed to be the Taku River. Of all large Chinook salmon harvested in all D111 fisheries, 1,139 fish were estimated to be of Taku River origin based on postseason GSI analysis.

Canadian Fisheries

In 2011, the Taku River commercial fishery harvest was 2,342 large Chinook, 514 nonlarge Chinook, 23,898 sockeye, and 8,446 coho salmon. An additional 680 large Chinook, 134 nonlarge Chinook, 521 sockeye and 4,002 coho salmon were harvested in assessment fisheries. The harvest of large Chinook salmon was below the average of 3,556 fish; 699 of these fish were caught while the fishery was in assessment mode, i.e. limited to weekly assessment/test fishery targets. The nonlarge Chinook and sockeye salmon harvests were average and the coho salmon harvest was above average. Fish originating from Taku fry stocks contributed an estimated 1,763 fish to the harvest, comprising 7% of the total sockeye salmon harvest. There were 63 days of fishing; this was above the average of 55 days. The seasonal fishing effort of 440 boat days was also above average. As in recent years, both set and drift gillnets were used with the majority of the harvest taken in drift gillnets. The maximum allowable mesh size was 20.4 cm (8.0 inches) except for the period from June 19 through July 12 at which time it was reduced to 14.0 cm (5.5 inches) in order to minimize incidental harvest of Chinook salmon.

In addition to the commercial harvests 150 large Chinook, 21 nonlarge Chinook, 124 sockeye, and 30 coho salmon were harvested in the aboriginal fishery. All but 11 sockeye and 46 Chinook salmon were taken in the lower river – nine sockeye salmon were taken at Kuthai Lake and two were taken at King Salmon Lake; 46 Chinook salmon were harvested in Nakina River. Using commercial harvest data it is estimated that of the 125 Chinook salmon harvest in the lower river, 104 were large fish; the Nakina River harvest is assumed to have been entirely large. The harvests in the Taku Aboriginal fishery average is 160 large Chinook, 84 nonlarge Chinook, 166 sockeye, and 295 coho salmon.

Recreational harvest figures are not available, but it is assumed that about 105 large Chinook salmon were retained in this fishery. The harvests of other species are believed to be negligible.

As noted, an assessment/test fishery to capture coho salmon for stock assessment purposes took place during the latter part of the fishing season; August 14 through October 5 (SW 34–41). This fishery harvested 4,002 coho and 521 sockeye salmon.

The bilateral preseason large Chinook salmon forecast, based on sibling relationships, was for a terminal run of 40,986 fish, below the average run of 47,200 fish. At a run size of this magnitude, factoring in the revised interim MSY escapement point target of 25,500 fish, the AC was 9,086 fish with 6,090 fish (67% of total) allocated to Canada and 2,997 fish (33% of total) allocated to the US. Adding BLCs of 1,500 fish for Canada and 3,500 fish for the U.S. meant that that the TAC was 14,086 fish.

The 2011 fishing plan indicated that the fishery was to be managed to the weekly guidelines reduced by 30% (Table 6.) until an inseason run assessment could be made. As in previous years, reliable inseason projections were not expected until after mid-May or three weeks of fishing. The AC was reduced in recognition that preseason forecasts have been biased high in recent years; Chinook salmon productivity appears to be lower than that predicted in the forecast models. Once reliable joint Canada/U.S. inseason projections were available, the fishery was to be managed to full directed fishery guidelines with the objective of meeting escapement and agreed harvest sharing objectives. Alternatively, in the event the run appeared to below forecast, the commercial fishery was to be reduced to a strictly assessment mode and serve as the assessment/test fishery identified in the PST agreement (as occurred in 2007 and 2008).

After inseason run projections identified the availability of an AC, weekly guideline harvests were to be developed to guide management decisions so that: a) the harvest was consistent with conservation and Treaty goals; and b) management was responsive to changes in projections of abundance, i.e. abundance-based. The guidelines were based on joint Canada/U.S. run assessments using MR estimates plus D 111 harvests through the previous week; the sum was then expanded by historical run timing, which was assumed to be average, unless otherwise agreed to by managers of both parties. Management of the Chinook salmon fishery was predicated upon weekly guidelines in order to avoid over harvesting specific components of the run. BLCs were not used in calculation of the guidelines; rather they were set aside for Aboriginal, recreational and directed sockeye salmon fisheries.

Table 6. Weekly large Chinook salmon guideline harvest for the Canadian commercial fishery in the Taku River in 2011.

SW	Start Date	Assessment/Test Harvest	Directed Harvest	Guideline
18	April 24	45	176	123
19	May 1	134	534	374
20	May 8	249	987	691
21	May 15	261	1,036	725
22	May 22	206	Inseason estimate	Inseason estimate
23	May 29	209	Inseason estimate	Inseason estimate
24	June 5	180	Inseason estimate	Inseason estimate
25	June 12	115	Inseason estimate	Inseason estimate
Total		1,400		

The management plan indicated that the commercial Chinook salmon fishery would open at a reduced directed fishery level at noon on Wednesday, April 27, SW 18, for an initial 24-hour period. Extensions to this and subsequent weekly fishing periods would be considered if the weekly guidelines were not achieved. For both drift and set gillnets, mesh sizes would be restricted to between 100 mm (4 inches) and 204 mm (8 inches) and net length would be restricted to a maximum of 36.6 m (120 ft). There was no restriction on the use of set gillnets as was the case early in the 2010 season when the fishery was operating in an assessment mode.

As per normal procedures, weekly fisheries for Chinook, sockeye, and coho salmon opened at noon Sunday in 2011, with the exception of the first and last openings. The first opening was delayed until midweek in order to increase the likelihood that river conditions would permit fishing (i.e. there were ice free areas).

The target harvest for the first week of Chinook salmon fishing was 123 fish. There were seven licences present, comparable to the number starting out in 2010. Water levels were below average. A hail conducted after 20 hours of fishing indicated a harvest of 43 fish – based on this harvest, the fishery was extended one day. About 50 fish were harvested each day, resulting in a total of 98 fish. The CPUE was 7 fish per boat day versus an average of 13 fish.

The guideline harvest for SW 19 (May 1–7) was 374 fish; in addition there was a shortfall of 25 fish from the previous week. An initial opening of two days was posted. The water level remained low. The day 1 harvest was 62 fish and the opening was extended one day. There was no improvement on day 2 (50 fish harvested) so an additional one day extension was posted. Fishing improved by the end of the opening with a day 4 harvest of 128 fish. The final harvest after four days of fishing was 316 fish with an average of six licences fishing daily. The weekly CPUE of 13 fish was below the 2005–2010 average of 28 fish. It is possible that the below average water levels actually had a negative effect at this time due to increased water clarity and associated net avoidance.

As was the case for SW 19, the initial posting for SW 20 (May 8–14) was two days. The weekly target was 691 fish, plus the shortfall of 76 fish from the previous week. The harvest for day 1 was 119 fish and a one day extension was posted. After three days of fishing the cumulative harvest was 509 fish; no additional fishing time was posted. The river level reading on the canyon gauge remained close to 0; the spring freshet was delayed as in 2010, possibly due to below average temperatures. The CPUE was 18, below the average of 51. Nine licences fished in SW 20.

It was hoped that an inseason estimate would be possible after SW 20; however, it was felt the available MR data was insufficient, as at this time in 2010. Consequently, SW 21 (May 15–21) was opened using the same management framework i.e. based on the preseason forecast with the AC reduced by 30%. The weekly guideline was therefore 725 fish and an opening of two days was posted. Based on a day 1 harvest of 256 fish this was extended an additional day, resulting in a total harvest of 786 fish. Water levels had finally started to rise for this week's fishery and by the end of the week the freshet had begun in earnest. The CPUE of 24 was closer to the average of 31 this week. Effort also increased to 11 licences.

At this point, the MR data was deemed to be sufficient data for generating an inriver abundance estimate, and the first Canada/US joint inseason run size projection was made. The MR estimate of 6,975 fish was added to the U.S sport fishery harvest through SW 20 (254 fish); this was expanded using average run timing at Canyon Island (33%), to give a terminal run size projection of 22,150 fish.

The joint run projection made after closing was 18,973 fish, down from the first inseason projection. The test fishery target for SW 23 (May 29–June 4) was 209 fish (similar to the previous week's target); however, this week a much shorter initial opening was posted, i.e. four hours starting Sunday noon. A total of 37 fish were harvested and a similar four-hour opening was subsequently posted for Monday. The resulting cumulative harvest was still short of the target, so this was repeated on Tuesday to bring the total harvest to 167 fish. No subsequent openings were posted for the week. Water levels had been rising and reached a seasonal maximum midweek. The CPUE of 28 fbd was close to the average of 26 fbd. Once again, there were 11 active licences.

A new run projection made after the third four-hour fishing period was 17,062 fish similar to the SW 22 projection, and the harvest target for SW 24 (June 5–11) was 175 fish. An opening of four hours was posted, resulting in a harvest of 180 fish. The river level dropped rapidly over the course of the opening. The CPUE of 105 fbd was more than three times the previous week's and turned out to be the peak CPUE of the fishery. Ten licences were active during this fishing period.

The SW 24 run assessment resulted in another slight decrease in the projection down to 16,601 fish. The test fishery target for SW 25 was 115 fish, and as per the previous two weeks an opening of four hours was posted starting Sunday noon. The resulting harvest was 96 fish; since this was close to the target the fishery was not extended. By now the river level was close to record low for this time and it continued to drop during the opening. The CPUE was 52 fbd, down by 50%, but still well above the average of 27 fbd. Effort was back up to eleven licences.

SW 25 marked the end of the Chinook salmon fishery. The joint run projection (15,866 fish) made after the four-hour fishing period again showed a slight decrease. The escapement to date was estimated at only 9,057 fish and was projected to 11,668 fish; assuming average run timing and factoring in BLC. This was well below the lower end of the escapement target range of 19,000 fish. In order to reduce additional Chinook salmon harvest a maximum mesh restriction of 14.0 cm (5.5 inches) was implemented for the directed sockeye salmon fishery.

One additional run projection was made after the first week of directed sockeye salmon fishing (SW 26), amounting to 16,284 fish.

The weekly guidelines assessment/test fish harvest targets sum to 2,623 fish (Table 7); the actual harvest of 2,408 fish was within 8% of the guideline harvest. The Chinook salmon bycatch in the sockeye salmon fishery was 624 fish, the Aboriginal harvest was 150 fish, and an assumed recreational harvest was 100 fish bringing the actual BLC to 874 large Chinook salmon; 42% below the allocation of 1,500 fish. Efforts taken to minimize commercial bycatch included the mesh restriction noted above and the reduced openings noted below.

Table 7. Forecasts of terminal run size, allowable catch (AC), and weekly guideline, and actual harvest of Taku large Chinook salmon, 2011.

SW	Terminal Run	AC	70% of AC	Weekly Guideline Assessment/Test Fish Target	Actual Harvest
18	40,986	7,086	3,889	123	98
19	40,986	7,086	3,889	374	316
20	40,986	7,086	3,889	691	509
21	40,986	7,086	3,889	725	786
22	22,151	0	0	206	261
23	18,973	0	0	209	167
24	17,062	0	0	180	175
25	16,601	0	0	115	96
Total				2,623	2,408

The DFO preseason forecast for the run of wild Taku sockeye salmon was based on a stock recruitment and sibling analyses, and projected a run of 230,685 fish; above the average run of 218,000 fish. In addition, approximately 8,300 enhanced fish (5,900 fish from Tatsamenie Lake and 2,400 fish from Trapper Lake) were forecast, above the average enhanced run size of 5,400 fish. Based on the treaty arrangement, an enhanced run of 5,000–15,000 fish provides Canada with a 21% share of the TAC with management based on weekly estimates of the TAC of wild fish. Subtracting the escapement target of 75,000 wild sockeye salmon from the forecast of 230,685 fish results in a TAC of 155,685 fish; 21% of this is 32,694 fish.

The forecast for the run of wild Tatsamenie fish was 25,400 fish. As in 2010, the egg-take goal for this season was based on a target of 30% of an expected escapement of 3,000 fish amounting to approximately 1.5 million eggs. To facilitate operation planning, the maximum number of eggs to be collected would be 2.0 million. In light of the favourable Tatsamenie forecast and reduced egg-take requirements the coordinated management that typically occurs, for Tatsamenie sockeye salmon in Taku Inlet in the U.S. drift gillnet fishery during SW 30–32 (July 18-August 7) and in the Canadian fishery during SW 31–33 (July 25–August 14) limiting the fisheries to two days/week unless otherwise agreed, was unnecessary in 2011.

As with the Chinook salmon fishery and as in past years, guideline harvests were developed each week for both sockeye and coho salmon fisheries to guide management decisions so that: a) the harvest was consistent with conservation and Treaty goals; and b) management was responsive to changes in projections of abundance, i.e. abundance-based. However, there was more flexibility regarding harvest timing, with weekly guidelines generally being replaced by cumulative weekly guidelines, and no formal arrangement to concur on run estimates or projections.

The management plan indicated that the sockeye salmon fishery would open on two days in SW 26 (June 19–25). However, due to the conservation concerns for Chinook salmon, coupled with concerns for Kuthai sockeye salmon which had seen low escapements for the previous four years this was reduced to one day. River levels were rising but were still very low and this was also factored in. The weekly guideline based on the preseason forecast was 3,291 wild fish (Table 8). Despite this however, sockeye salmon CPUE of 72 was near the average of 80. The weekly harvest was 869 sockeye salmon with 12 licences fishing.

SW 27 (June 26–July 2) was also opened conservatively for two days. The cumulative guideline harvest through this week based on the preseason forecast was 6,042 fish. The river had risen during SW 26 and was now at slightly above average levels, but stable. Fishing was poor; the CPUE of 35 was not only lower than the previous week's, but about half of the average 71. The fishery was held to two days, and had an almost identical landing (837 fish) as the previous week. The number of active licences was also the same.

Table 8. Canadian inseason forecasts of terminal run size, total allowable catch (TAC), and spawning escapement of Taku sockeye salmon, 2011.

SW	Terminal Run	TAC	Projected Escapement	Canadian TAC	Inseason guideline	Actual Harvest
26	230,685	155,685	75,000	32,694	3,462	886
27	230,685	155,685	75,000	32,694	6,042	1,813
28	180,153	105,153	131,558	33,640	9,261	3,927
29	165,485	90,485	108,125	18,097	7,479	5,316
30	161,330	86,330	87,053	18,129	9,533	9,984
31	191,132	116,132	123,429	27,817	18,136	14,272
32	188,836	113,836	116,102	23,906	19,079	19,876
33	190,738	115,738	107,993	24,305	21,818	22,542

The following opening SW 28 (July 3–9) was again limited to two days. The cumulative guideline harvest through this week, still based on the preseason forecast, was 9,261 fish; 1,813 harvested to date. The river level had dropped again to below average. CPUE increased albeit only to average levels (average 61). The fishery was again held to two days. The weekly harvest was 2,114 fish with an average of 11 licences fishing. An inseason run assessment was made after this week's fishery. This projected a run of 180,153 fish, well below the preseason forecast of 230,685 wild fish.

Once more two days was the initial posting for the SW 29 opening (July 10–16). The cumulative guideline decreased substantially based on inseason information was 7,479 fish with a balance of 3,552 fish. The river was at a record low for this time, but showed an upward trend during the opening. With a day 1 CPUE about half of average the fishery was not extended. The weekly harvest was 1,391 fish bringing the cumulative to 5,316 fish. Effort was unchanged from SW 28. CPUE improved on day 2 for a weekly average of 63, but still below the average of 87. The run projection made after closing was 165,485 fish.

Based on this assessment the weekly guideline through SW 30 (July 17–23) was 9,533 fish. With a cumulative harvest to date of 5,316 there was a free balance 4,217 fish. An opening of three days was posted. The mesh size restriction was lifted, allowing mesh sizes of up to 204 mm (8 inches), and thereby reducing the bycatch of pink salmon which were abundant at this time. The CPUE was about average; however canyon fish wheel catches were above average. The fishery was extended to a fourth day. The weekly harvest was 4,668 fish with 11 licences fishing. CPUE improved on day 3 to bring the weekly average to 106 versus the average of 93. Water levels were similar to SW 29 but showed a decreasing trend.

The run projection made after closing in SW 30 was 161,330 fish. The escapement projection was 87,053 fish, slightly above the upper end of the guideline range of 71,000 to 80,000 fish.

Based on this outlook the cumulative guideline through SW 31 was 12,500 fish. The harvest through SW 30 was 9,984 fish, showing a positive balance of 2,500 fish. With a favourable outlook for Tatsamenie sockeye salmon SW 31 was opened on 3 days. River levels were almost identical in magnitude and trend to SW 29 levels. CPUE increased to 128 versus the average of 112. The weekly harvest was 4,355 fish with 11 licences fishing.

The run projection was improved after closing to 191,132 fish. There was now a cumulative guideline of 18,136 fish and an actual harvest to date of 14,272 showing a positive balance of 3,864. The escapement projection was now 123,429 fish, well above target. Consequently, the fishery for SW 32 was opened on four days. The CPUE of 171 fish marked the peak of the season. A total of 4,900 fish were harvested by 11 licences, amounting to a CPUE of 117 fbd, close to the average of 111. River levels were down slightly.

The assessment made after closing projected a similar run size of 188,836 fish. This was associated a cumulative guideline of 19,079 fish through SW 32. The harvest to date was 19,876 fish meant that the positive balance had been eliminated and the fishery was on track. SW 33 (August 7–13) was posted for 2 days using a guideline balance to the end of the week of 1,583 fish. The CPUE on day 1 was only above average despite very low water levels and the Canyon Island fish wheel CPUE was below average. With a harvest of 864 fish on day 1, the fishery was not extended. Harvests improved substantially on day 2 resulting in a total of 2,415 fish with 11 licences fishing. CPUE averaged 115 fbd, well above the average of 70.

SW 33 marked the end of the directed sockeye salmon fishery. The run projection at this time was 190,738 fish. This was associated with a guideline harvest of 21,818 fish; the actual harvest was 22,542 fish. The escapement projection was 107,933 fish, above the upper end of the escapement goal range. The projected season guideline was 24,305 fish. The additional 2,463 sockeye salmon were harvested in the directed coho salmon fishery plus the 124 fish harvested in the Aboriginal fishery brought the directed harvest total 24,153 fish.

The cumulative harvest of Taku enhaned fish was 1,576; this included harvests of 1,108 Tatsamenie Lake fish and 468 Trapper Lake fish. In addition, 106 Stikine origin fish were harvested.

The cumulative commercial fishery sockeye salmon CPUE for the season was 821, close to the average of 813. As in 2010, the low water levels undoubtedly had a positive influence on harvest rates. The increases in maximum net length from 30.5 m (100 feet) to 36.6 m (120 feet), which were implemented in 2008 and 2009 for drift and set gillnets respectively, were also likely a positive influence. CPUE was above average for SW 30–33. For the other weeks it was average or below average. The peak CPUE of the season occurred in SW 31.

The preseason outlook for Taku River coho salmon was based on harvest rates in the Taku River CWT program, which were used to estimate the number of coho salmon smolts which emigrated during the spring of 2010, with survivals to return as adults in 2011. Assuming that the marine survival rate would be similar average (9%), a terminal run of 165,268 was expected in 2011, below the average run size of 197,041 fish. Assuming average U.S. exploitation rates (39%), this translated to a border escapement of 100,813 fish.

SW 34 (August 14–20) was opened on 2 days primarily due to sockeye salmon considerations and the fact that the river level was substantially below record levels and dropping at the time of posting. A total of 257 coho and 377 sockeye salmon were harvested on day 1. The fishery was by extended by one day. Effort was down to six licences, due in part to the fact that some licences were focusing on the coho salmon test fishery which also started this week. The weekly commercial harvest was 802 coho and 1,001 sockeye salmon, with a coho salmon CPUE of 42 was below average (57) despite the good fishing conditions.

SW 35 (August 21–27) was opened on four days. A Tulsequah flood occurred late in SW 34 and peaked just prior to opening. An assessment made early in the week projected a border escapement greater than 75,000 coho salmon. This meant that a TAC of 10,000 fish was available to Canada; projected escapement in excess of the goal of 27,500 to 30,000 fish. At this point the projected surplus escapement was in excess of 30,000 fish. The harvest was less than 150 fish after 3 days of fishing, due in part to the flood. The fishery was extended by one day and then another. Harvests improved substantially as the flood receded resulting in a weekly total of 877 coho salmon. There were four licences active for the opening. The CPUE of 35 fbd was less than half of the average of 86.

SW 36 (August 28–September 3) was opened on five days. River levels were back below average and dropping. A total of 2,581 coho salmon were caught by six licences. The CPUE was much improved averaging 93 fbd, which was close to average.

With continued favourable border and spawning escapement projections coupled with declining effort SW 37 (September 4–10) was posted for four days and extended two. Fishing effort was down to three licences. However, another flood was in progress and lasted the entire week. Not surprisingly, CPUE was down markedly to 20 (average 53). The weekly harvest of coho salmon was 326 fish.

SW 38 (September 11–17) was posted for six days. River level dropped, and by the end of the week it was below average. CPUE was back up, averaging 81. This was above the average of 60 but it should be noted that in the last 10-years there were only three years in which fishing occurred in SW 38.

SW 39 (September 18–24) was not opened until midweek as all of the active licences were focused on test fishing. Then the fishery was opened for the remainder of the season, i.e. until October 6. Only one licence was active at any one time during this period resulting in a total harvest of 216 fish. The last day of commercial fishing activity was September 30.

An assessment conducted at this time projected an inriver run of 64,000 fish, which was associated with an AC of 7,500 fish. Additional harvest was also available factoring in all other harvest; Aboriginal and test fisheries; the escapement was projected to be 51,000 fish, i.e. 16,000 fish above the upper end of the escapement goal range.

As mentioned a test fishery was again conducted in 2011 in order to ensure that run assessment continued for the majority of the coho salmon run. The fishery started in SW 34 and continued to October 5 (SW 41) harvesting 4,002 coho and 521 sockeye salmon. It was once again carried out via a contract with Taku Wild, owned and operated by the Taku River Tlingit First Nation. Weekly harvest targets versus actual harvests are as follows:

Table 9. Weekly guidelines and actual harvest for the Taku River coho salmon assessment/test fishery, 2011.

SW	Target	Actual	Cumulative
34	300	300	300
35	400	400	700
36	500	500	1,200
37	600	295	1,495
38	700	1,005	2,500
39	600	600	3,100
40	500	500	3,600
41	400	402	4,002

The preliminary postseason coho salmon MR estimate indicates that 83,349 fish reached the border. As per the PST provisions established in 2009, the Canadian AC after SW 33 was 10,000 coho salmon plus surplus escapement (32,370 fish). The actual treaty harvest, excluding the test fishery, was 6,102 fish. This includes the commercial harvest taken after SW 33 (6,132 fish), plus the Aboriginal fishery harvest of 30 fish; it is assumed that the recreational harvest of coho salmon was zero. Subtracting the total inriver harvest of 12,492 fish from the border passage translates to a spawning escapement estimate of 70,857 fish; about double the upper end of the escapement goal range of 27,500 to 35,000 fish. The cumulative commercial coho salmon CPUE through SW 35 (which is when the fishery typically ceases) was 154 below the average of 217.

Escapement

Sockeye Salmon

Spawning escapement of sockeye salmon into the Canadian portion of the Taku River drainage is estimated from the joint Canada/U.S. MR program. Counting weirs operated by DFO at Little Trapper and Tatsamenie lakes and by the TRTFN at Kuthai and King Salmon lakes provide some information on the distribution and abundance of discrete spawning stocks within the watershed.

The sockeye salmon MR program has been operated annually since 1984 to estimate the above border run size. Spawning escapement is then estimated by subtracting the inriver harvest. The final postseason above border run estimate in 2011 is 139,926 fish; subtracting the inriver harvest of 24,543 fish (23,898 commercial, 124 Aboriginal, and

521 coho salmon test fishery) indicates that 115,383 sockeye salmon reached the spawning grounds. This spawning escapement was near the average and above the upper end of the interim escapement goal range of 71,000 to 80,000 sockeye salmon. The Canyon Island fish wheel catch of 3,584 sockeye salmon was 44% below average; however as in 2010, low water levels likely had a substantial negative impact on fish wheel effectiveness.

The sockeye salmon count through the Kuthai Lake weir was 811 fish; counts during the last six years have not exceeded 2,000 fish. The 2011 count, the second lowest on record, was below the average of 3,100 fish and 20% below the primary brood year escapement of 1,015 fish. The fish arrived at the weir at the typical time but passage was sporadic with many days of 0 counts. The run midpoint, July 22, was about ten days earlier than average, due in part to a pulse of fish which arrived on July 19.

A weir was again operated at King Salmon Lake in 2011. However, the count of 523 sockeye salmon was exceeded by a helicopter survey count of 935 fish on September 19. It is speculated that alternate access to the lake may exist through a wetland located just south of the lake outlet and that some fish used this to bypass the weir. The aerial survey count was expanded by 3.1 (based on the 2006, 2008, and 2010 weir and aerial data) to give an estimated escapement of 2,899 fish in 2011. This is below the 2004–2010 average and 76% below the primary brood year count of 2,177 fish. In calculating the average escapement, the 2009 figure was estimated at 1,144 fish using an aerial survey expansion of 3.1, while the 2005 count of five fish was excluded.

The Little Trapper Lake weir count was 3,809 sockeye salmon. This was above the record lows seen in 2008 and 2010 but below the average of 12,420 fish. The primary brood year was the second highest escapement on record (25,760 fish). The run timing was about average, however the peak was short and the run was 96% complete by the average midpoint date (August 10). As was the case in 2010, there were no removals for artificial spawning.

The Tatsamenie Lake weir count of 7,880 sockeye salmon was close to the average of 8,600 fish but below the 2006 primary brood year count of 22,475 fish. (As at Little Trapper, the second highest count on record was observed in 2006). The fish arrived at the lake at the typical time; however the run midpoint was early (August 22, versus the average of September 1). Approximately 1,300 fish were held for gamete collection.

Chinook Salmon

Spawning escapement of Chinook salmon in the Canadian portion of the Taku River drainage is typically estimated from the joint Canada/U.S. MR program. In 2011, tag application took place from April 26 through July 17. Tag recovery effort consisted of the commercial assessment/test Chinook salmon fishery from April 27 through June 18 (SW 18–25), the sockeye and coho salmon commercial fisheries (SW 26–40), and the coho salmon test fishery (SW 34 – 41); in addition, there was spawning ground sampling in August and September on the Nakina, Tatsatua, Kowatua, Nahlin, Dudidontu rivers, as well as Tseta Creek. Spawning grounds sampling uses a multitude of gear types including carcass weirs and hand carcass recovery, rod and reel snagging, and even dip nets and the use of multiple gear types has been shown to decrease age, sex, and size selectively. Thus, the spawning grounds data is considered the most unbiased sample of the marked fraction in MR work. Unfortunately, not enough tags were recovered on large Chinook salmon during spawning grounds sampling to directly estimate the large-sized escapement. However, ample numbers of tags were recovered on medium Chinook salmon resulting in a medium-sized Chinook salmon estimate of 15,562 fish (SE=3,112). The ratio of medium- to large-sized Chinook salmon seen in the combined spawning grounds sample (i.e., 0.57) was then used to expand to an estimate of the large Chinook salmon escapement resulting in final large Chinook salmon estimate of 27,523 (SE=4,139).

Aerial surveys of large Chinook salmon to the six escapement index areas were as follows: Nakina 1,380 fish (31% below average), Kowatua 377 fish (51% below average), Tatsamenie 917 fish (4% below average), Dudidontu 301 fish (40% above average), Nahlin 808 fish (16% below average), and Tseta Creek was not flown. Survey conditions and timing were good except for the Kowatua index which was late due to high water. The total count of 3,783 large Chinook salmon was 32% below average.

Carcass weirs were again operated on the Nakina and Tatsatua rivers in order to obtain tag and age-length-sex data. Totals of 493 and 473 large Chinook salmon were encountered (this includes supplemental angling at Little Tatsamenie), 7% and 27% lower respectively than what was observed in 2010. Low water did not hamper carcass recovery at the Nakina site, as it may have in 2010.

Coho Salmon

Spawning escapement of coho salmon in the Canadian portion of the Taku River drainage was estimated from the joint Canada/U.S. MR program. Tag application occurred from July 1 until September 27 (SW 40) and recovery occurred until October 5 (SW 41). The tag recovery effort consisted of the commercial fishery, augmented by a test fishery from SW 34 to October 5. The final postseason above border run estimate is 83,349 fish; taking into account the inriver harvest of 12,478 fish (8,446 commercial, 30 Aboriginal and 4,002 test) the spawning escapement estimate is 70,871 fish. This is below the average of 129,439 fish but about double the upper end of the interim escapement goal range (27,500 to 35,000 fish).

Sockeye Salmon Run Reconstruction

An estimated 65,089 wild Taku River sockeye salmon were harvested in the traditional U.S. District 111 drift gillnet fishery. This final estimate was based on SPA. An additional 1,024 wild sockeye salmon were estimated to have been taken in the U.S. inriver personal use fishery. The estimated total U.S. harvest of wild Taku sockeye salmon is 66,113 fish (Table 5).

In the Canadian commercial fishery, the final postseason harvest estimate of wild Taku sockeye salmon is 22,145 fish. An estimated 114 wild sockeye salmon were taken in the

Canadian Aboriginal fishery. Therefore, the estimated Canadian treaty harvest of wild Taku sockeye salmon is 22,259 fish (Table 5). An additional 480 wild sockeye salmon were taken in test fisheries.

The final postseason estimate of the above border run size of wild sockeye salmon based on the joint Canada/U.S. MR program is 135,761 fish. Deducting the Canadian inriver harvest of 22,259 fish from the above border run estimate resulted in an estimated escapement of 113,022 wild sockeye salmon. The terminal run of wild Taku sockeye salmon was estimated at 201,874 fish. Based on the escapement goal of 75,000 fish the TAC was 126,874 wild sockeye salmon.

The escapement of Taku sockeye salmon originating from the fry stocking program was estimated to be 2,362 fish from broodstock otoliths collected at Tatsamenie Lake and estimated for the Trapper Lake escapement. The final estimate is for a terminal run of 9,856 enhanced Tatsamenie and Trapper fish (Table 4).

ALSEK RIVER

Alsek River salmon stocks contribute to the U.S. commercial gillnet fisheries located in Dry Bay, at the mouth of the Alsek River (Figure 3). Unknown quantities of Alsek River origin fish may also be taken in the U.S. commercial gillnet and troll fisheries in the Yakutat area. No commercial fishery exists in the Canadian portions of the Alsek River drainage, although Aboriginal and recreational fisheries occur in the Tatshenshini River and some of its headwater tributaries (Figure 3).

Harvest Regulations & Management Objectives

Although harvest sharing of Alsek River salmon stocks between Canada and the U.S. has not yet been specified, Annex IV, Chapter 1 calls for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook and sockeye salmon. Interim escapement goal ranges for Alsek River Chinook salmon at Klukshu is 1,100 to 2,300 fish and sockeye salmon was initially set by the TTC at 33,000 to 58,000 fish (Klukshu: 7,500 to 15,000 fish). The principle escapement-monitoring tool for Chinook and sockeye salmon stocks on the Alsek River is the Klukshu weir; operated by DFO in cooperation with the Champagne-Aishihik First Nation (CAFN). The weir has been in operation since 1976. Traditional MR programs to estimate the total inriver abundance and the fraction of the escapement contributed by the Klukshu stocks were implemented for a number of years one and two decades ago and continue in the form of genetic based estimates funded through the Northern Endowment Fund in more recent years.

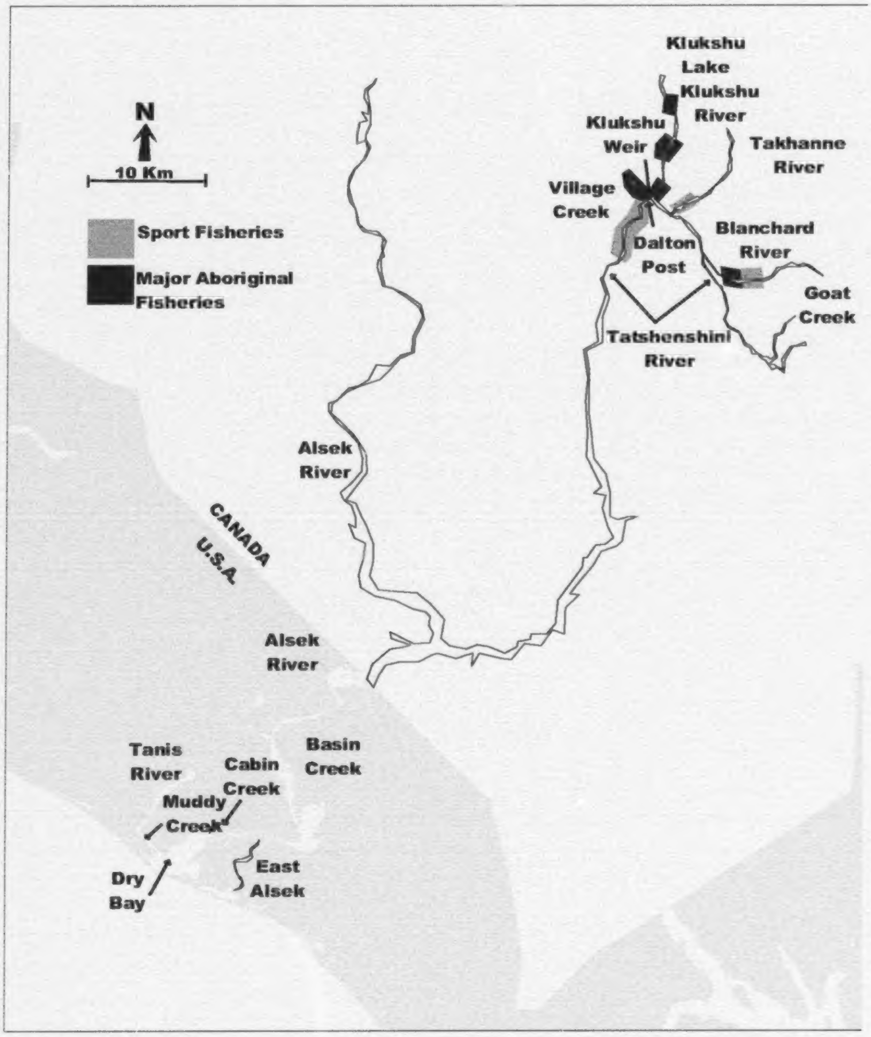
Klukshu Lake
Klukshu River
Klukshu Weir
Takhanne River
Village Creek
Blanchard River
Dalton Post
Goat Creek
Tatshenshini River
N
10 Km
Sport Fisheries
Major Aboriginal Fisheries
Alsek River
CANADA
U.S.A.
Alsek River
Tanis River
Cabin Creek
Basin Creek
Muddy Creek
Dry Bay
East Alsek

Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

Preseason Forecasts

The 2011 overall Alsek drainage sockeye salmon run was expected to be approximately 84,400 sockeye salmon; this is slightly above the average estimate of 80,500 sockeye salmon. The outlook for 2011 was based on a predicted run of 19,400 Klukshu sockeye salmon derived from the latest Klukshu stock-recruitment data (Eggers et al. 2011) and a Klukshu contribution rate to the total run of 23% (based on MR results 2000–2004 and run size estimates using GSI (2005–2006). Principal contributing brood years were 2006 (Klukshu escapement of 12,890 sockeye salmon) and 2007 (Klukshu escapement of 8,479 sockeye salmon); average Klukshu sockeye salmon escapement is 13,000 fish. Based on historical stock-recruitment analysis, the range of Klukshu escapements that appeared most likely to produce maximum sustained yields was 7,500 to 15,000 sockeye salmon.

The Klukshu early sockeye salmon run counts in 2006 and 2007 were 247 and 2,725 fish, respectively. The average count is 2,700 sockeye salmon which is above the optimum escapement level of 1,500 fish as determined through separate stock-recruitment analyses of the early run conducted by DFO. The early run to the weir was expected to be below this level in 2011.

The Klukshu Chinook salmon escapements in 2005 and 2006 were 963 and 566 Chinook salmon, respectively. For comparison, the average is 1,440 Chinook salmon. The brood year escapement in 2005 was close to the escapement goal range of 1,100 to 2,300 Chinook salmon as determined from the historical stock-recruitment analysis. Based on these primary brood year escapements, the outlook for 2011 is 2,000 Klukshu Chinook salmon, above the average (1,700) and within the escapement goal range.

U.S. Fisheries

Preseason expectations were for above average runs for both sockeye and Chinook salmon. These expectations were based on parent-year escapements to the Klukshu River. The Alsek River recorded above average runs for both sockeye and Chinook salmon and escapement goals were attained in 2011.

In 2011 management strategies were back to traditional regimes by monitoring fishery performance data and comparing it to historical CPUE for a given opening to adjust time and area openings. The Alsek River commercial fishery opened on the first Sunday in June, SW 24 (June 5) for 24 hours with 12 permits catching 248 Chinook and 1,000 sockeye salmon. Effort started to decline by SW 34 and management strategies switched to coho salmon. Coho salmon are targeted from mid-August on and effort becomes minimal. Fishing times remained at three days per week from SW 34 through the second week in October (SW 42), and the river was not fished during the last three weeks of the season.

The 2011 Dry Bay commercial set gillnet fishery harvested 546 Chinook, 24,169 sockeye, and 1,614 coho salmon (Table 9). No pink and 11 chum salmon were harvested. The Chinook salmon harvest was above the average of 501 fish. The sockeye salmon harvest was above the average of 15,424 fish. The coho salmon harvest was below average. Very little effort was recorded during the coho salmon season due to market conditions. The number of fishing days was 37. The total effort expended in the fishery was 168 boat days, which was above average.

The department conducted a test fishery for Chinook salmon in 2011. This test fishery was conducted in 2005 through 2008. The 2011 test fishery opened on May 15 (SW 21) and closed on June 24 (SW 25). Totals of 421 Chinook salmon and 157 sockeye salmon were harvested (harvest quota maximum of 500 fish). The gear used throughout the fishery was an 8 ¼ inch meshes, 20 fathom set gillnet. All were sampled for ASL, and for CWT (just in case, none found), and for genetics.

Canadian Fisheries

Due to the absence of the harvest monitor position in 2005 through 2010, harvests from the food fishery were estimated based on fishery performance data compared with the weir counts. For 2011, the harvest monitor position was reinstated midway through the season. The harvest estimate for 2011 was comprised of the fish taken from the Klukshu River weir (elders only), an estimate of harvests above/below the weir (based on the past relationship with the weir count and harvest), and averaged with the data collected through the harvest monitor. It is estimated that 119 Chinook, 2,053 sockeye, and 9 coho salmon were harvested in the food fishery. The average harvests were 83 Chinook, 1,363 sockeye, and 7 coho salmon.

Table 10. Final harvest and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2011.

	Chinook	Sockeye	Coho
Escapement Index [a]			
Klukshu Weir Count	1,670	21,389	2,119
Klukshu Escapement	1,609	20,769	2,110
Harvest [b]			
U.S. Commercial	546	24,169	1,614
U.S. Subsistence	42	175	18
U.S. Test	421	157	0
Canadian Aboriginal	119	2,053	9
Canadian Recreational	95	57	20
Total	1,223	26,611	1,661

[a] Klukshu River salmon stocks represent an assumed large and variable portion of the total Alsek River salmon escapement.

[b] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

Final harvest estimates for the Tatshenshini recreational fishery were above average for Chinook salmon, with an estimated 95 fish retained (275 released), and near average for sockeye salmon with 57 retained (220 released), and 20 coho salmon were retained (50 released). These were 23% above average for Chinook salmon, 36% above average for sockeye salmon, and 26% of average for coho salmon. Retention of sockeye salmon was permitted on August 13th ahead of the normal opening date of August 15th due to the good escapement of sockeye salmon into the Klukshu River. In addition, daily and possession limits for sockeye salmon were increased to 4 and 8 on August 27th.

Management of salmon in the Yukon Territory is a shared responsibility between DFO and the Salmon Subcommittee (SSC). The SSC was established in 1995 pursuant to the Comprehensive Land Claim Umbrella Final Agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon Territory. The

Committee is a public board consisting of ten members, 70% of which are appointed by Yukon First Nations. Two CAFN members sit on the SSC. Although the Committee currently operates by consensus, the voting structure of the Committee is organized so that, should a vote be necessary, 50% of the votes reside with appointees of Yukon First Nations.

The 2011 Alsek-Tatshenshini management plan, adopted by CAFN, SSC, and DFO, was based on the objectives described in the Harvest Regulations & Management Objectives section above. For Chinook and early run sockeye salmon management, the status of the Klukshu weir counts was to be reviewed on or about July 18 to ensure weir and spawning escapement targets were on track. The status of the late run sockeye salmon would be reviewed the first week of September. Adjustments to inseason fishing regimes in the recreational and aboriginal fisheries would be made if deemed necessary. Other key elements of the plan are described below.

The center of aboriginal fishing activity in the Alsek River drainage occurs at the CAFN village of Klukshu, on the Haines road, about 60 km south of Haines Junction. Salmon are harvested by means of gaff, small gillnets, sport rods, and traditional fish traps as the fish migrate up the Klukshu River and into Klukshu Lake. The fishing plan for the aboriginal fishery in the Klukshu River and adjacent areas allowed for fishing by any means (as established in the communal license) 7 days a week. Conservation thresholds that might invoke restrictions in the Aboriginal fishery were projected Klukshu weir counts of <1,100 Chinook and <1,500 early sockeye salmon. Food fisheries also exist on Village Creek and in the headwaters of the Tatshenshini River and tributaries thereof (Goat Creek, Stanley Creek, Parton River, and the Blanchard River). The plan did not restrict the fishery other than to reserve harvests of Chinook salmon at Goat Creek, Stanley Creek, and the Parton River for elders only.

The majority of the recreational fishing effort on the Alsek drainage occurs in the Tatshenshini River, at and just downstream of the mouth of the Klukshu River in the vicinity of the abandoned settlement of Dalton Post. The management plan prohibited the retention of sockeye salmon in the recreational fishery prior to August 15 unless the weir count projection for the early run was >4,500 sockeye salmon. The Chinook salmon daily harvest limit was one fish and the possession limit was two Chinook salmon. For other salmon species, the daily harvest and possession limits were two and four fish, respectively. However, the aggregate limit for all salmon combined was two salmon per day, four fish in possession. Starting in 2003, recreational salmon fishing was permitted in the Tatshenshini River seven days a week; this fishery had previously been open from 6:00 am Saturday to 12:00 noon Tuesday each week. Headwater areas in the vicinity of the British Columbia/Yukon border were to be closed in late July to protect spawning Chinook salmon. Conservation thresholds that were expected to invoke additional restrictions in the recreational fishery were projected Klukshu weir counts of <1,300 Chinook and < 10,500 sockeye salmon (early and late runs combined).

A mandatory Yukon Salmon Conservation Catch Card (YSCCC), introduced by the SSC in 1999, was required by all recreational salmon fishers in 2011. The purpose of the

YSCCC is to improve harvest estimates and to serve as a statistical base to ascertain the importance of salmon to the Yukon recreational fishery. Anglers are required to report their catch via mail by the late fall. Information requested includes the number, sex, size, date and location of salmon caught and released.

Since 2001, CAFN has imposed a fishing area closure from the Klukshu River Bridge crossing up to the new weir location to allow for better staging opportunities for salmon in the vicinity of the Klukshu/Tatshenshini confluence.

Escapement

Total drainage abundance programs are being investigated as part of the development of abundance-based management regimes and to accurately assess whether the escapement goals for Alsek River Chinook and sockeye salmon stocks are appropriate and if so, are being achieved. At this time, there are no programs in place to estimate the drainage wide coho salmon escapement. A large and variable proportion of the escapement of each species is enumerated at the weir on the Klukshu River. Current escapement monitoring programs including the Klukshu weir, Village Creek electronic counter, and aerial surveys allow annual comparisons of escapement indices. The most reliable long-term comparative escapement index for Alsek River drainage salmon stocks is the Klukshu River weir count. Escapements for 2011 are shown in Table 9.

Sockeye Salmon

In 2011 the final weir count and escapement estimates of Klukshu River sockeye salmon were 21,389 and 20,904 fish, respectively (Table 9). The count of 5,635 early run fish (count through August 15) was nearly twice of average while the count of 15,754 late run fish was 44% above average. The total escapement of 20,782 fish was well above the upper end of the recommended escapement goal range of 7,500 to 15,000 fish. The sockeye salmon escapement to Village Creek was 352 fish. An over flight of Nesketahin Lake in late September resulted in an estimate of only 150 spawners which verified the low count at Village Creek (average count is 2,804 fish).

Chinook Salmon

The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. The final Chinook salmon weir count was 1,671 and escapement was 1,610 and were both more than 10% above average (Table 9). The 2011 escapement was near the middle of the escapement goal range of 1,100 to 2,300 Klukshu Chinook salmon.

Coho Salmon

The Klukshu River coho salmon weir count was 2,119 and was average. As in past years, the weir count cannot serve as a reliable run strength indicator as the weir is normally removed well before the end of the coho salmon run to the Klukshu River.

ENHANCEMENT ACTIVITIES

Egg Collection

In 2011, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the twenty-third year, and in the Tatsamenie Lake system on the Taku River, for the twenty-second year of this program.

Tahltan Lake

The egg collection was contracted to Arc Environmental Ltd. for the sixteenth consecutive year. The egg-take goal at Tahltan Lake of 6.0 million eggs was achieved, with a total of 6.48 million eggs collected. As in 2010, the ability to reach the egg take goal in 2011 was largely due to the changes in methodology and additional resources that were utilized. Expanding on the success observed in 2009 with the short term holding of unripe female brood stock, it was decided that all female sockeye salmon captured during brood stock collection activities using traditional capture methodology (beach seining of the primary spawning site) would be held until ripe and then spawned. In past years, only ripe fish were held for spawning the following day. Again in 2011, an additional two person crew was used to access secondary spawning sites that had not been utilized in the past. Brood stock from the secondary spawning sites was collected using rod and reel technology. Through the additional efforts in 2011, 58% of the total females spawned were from short term holding and 15% were collected from the secondary sites. Without the additional efforts undertaken in 2011, it is estimated that less than 4.0 million eggs would have been collected. The last day of brood stock collection occurred on the 18th of September and the final egg take was completed on the 20th of September. This was the earliest completion date since the start of the program in 1989. It should be noted that ripe females were present earlier than normal which lent to the success of the egg collection.

Tatsamenie Lake

B. Mercer and Associates Ltd was contracted to collect eggs. Tatsamenie Lake broodstock was captured for the seventeenth year at an adult enumeration weir located at the outlet of Tatsamenie Lake. Egg takes were initiated September 15th at Tatsamenie Lake. An estimated 2.05 million eggs were collected from 523 females and milt was collected from a like number of males. Tatsamenie Lake egg takes were completed on the 27 September. The receipt of two lots of Tatsamenie eggs was delayed by one day for safety reasons due to poor flying conditions.

Trapper Lake

While an enhancement project at Little Trapper Lake was included in the TEPP, no eggs were collected due to the low adult escapement into Little Trapper Lake and no eggs were stocked into Big Trapper Lake as proposed under the terms of the TEPP. This project was operated with Northern Fund monies but will be reported in TBR reports.

Incubation, Thermal Marking, and Fry Plants

The egg incubation and thermal-marking program at Snettisham Hatchery went smoothly in year 2010/2011. Snettisham hatchery is operated by DIPAC, a private aquaculture organization in Juneau. A cooperative agreement between ADF&G and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Incubation of 2010 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 25 to June 12, 2011. There were 11 incubators lost to IHNV this year: 1.2 million and 1.0 million eggs assigned for release into Tahltan and Tuya lakes respectively. This was the largest loss of TBR eggs in the history of the program, representing 43% of the total Tahltan Lake egg take. There were no IHNV losses to the Tatsamenie stock.

The IHNV losses were the highest in the programs history; however the cumulative losses since 1989 are consistent with the history of sockeye salmon culture in Alaska. The enhancement subcommittee will be continuing to assess these losses and any future ones with regard to any changes in techniques that may be necessary to safeguard against this pathogen.

Tahltan Lake

A total of 1.235 million fry from the 2010 Tahltan Lake sockeye salmon egg take was stocked back into that lake in 2011. Survival from green-egg to outplanted fry was 40%. Fry outplanting took place on May 25 and 26.

Tuya Lake

There were 1.245 million fry stocked in Tuya Lake on June 10 and 12. These fish were from eggs collected at Tahltan Lake in the fall of 2010. Survival from green-egg to outplanted fry was 44%.

Tatsamenie Lake

Approximately 84% of the eggs collected in 2010 from Tatsamenie Lake survived to the fry stage at the Snettisham Hatchery in Alaska. Between May 25th and June 12th approximately 1.40 million sockeye salmon fry were stocked into Tatsamenie Lake. In addition, as part of an onshore extended rearing project, 198,000 fry which had been reared to 0.72 grams in the hatchery were released into four onshore rearing tanks located near the northeast end of the lake (on June 7th). These fish were released in two groups, one on August 1 and the other on August 14, at an average size of 2.62 and 4.0 grams, respectively. As was observed in 2010, a portion of these fish appeared to out-migrate almost immediately, rather than remaining in the lake to rear. Full evaluation of the success of this study will not be available until these fish return as adults.

Sockeye Supplementation Evaluation Surveys

Acoustic, Trawl, Beach seine and Limnological Sampling

Standard limnological surveys were conducted at Tatsamenie and Tahltan lakes. No surveys were conducted on Trapper or Tuya lakes. No hydroacoustic surveys were conducted in 2011.

Thermal Mark Laboratories

ADF&G Thermal Mark Laboratory

During the 2011 season the ADFG thermal mark lab processed 19,600 sockeye salmon otoliths collected by ADFG and DFO staff as part of the U.S./Canada fry-stocking evaluation program. These collections came from commercial and test fisheries in both U.S. and Canadian waters on the Taku and Stikine rivers over an 11-week period. In addition, several escapement samples were examined. The laboratory provided estimates on hatchery contributions for 86 distinct sampling collections. Estimates of the percentage of hatchery fish contributed to commercial fishery catches were provided to ADF&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Final estimates of the contribution of enhanced fish to Alaskan fisheries were 29,122 Stikine River fish and 5,604 enhanced Taku River fish. Final estimates of contributions of enhanced fish to Canadian fisheries were 24,755 Stikine River fish and 1,878 enhanced Taku River fish.

Canadian Thermal Mark Laboratory

Subsamples of juvenile and adult otolith samples collected at the study lakes during the 2011 season were being analyzed at the DFO thermal mark lab in Whitehorse. Results from otoliths collected from Tatsamenie broodstock result in an estimate of 1,861 thermally marked fish in that escapement. Other results will be used to estimate the number of marked fish in other escapement and in smolt projects.

APPENDICES

Standards

Large Chinook salmon are MEF length ≥ 660
Unless otherwise stated Chinook salmon are large
Test fisheries for Chinook salmon became commercial assessment test fisheries starting in 2004
Data not available to estimate catches of Alaska Hatchery pink and chum salmon
All catches of Tahltan, Trapper, and Tatsamenie, unless otherwise noted, include both wild and hatchery fish.
Bold numbers are incomplete numbers

Appendix A. 1. Weekly harvest of Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2011.

	Subsistence	D108 sport harvest			D108 gillnet harvest				D108 troll harvest			US total large
SW	Large Stikine	Large total	Large nonStikine	Large Stikine	Nonlarge	Large total	Large nonStikine	Large Stikine	Large total	Large nonStikine	Large Stikine	Stikine harvest
18		5		5				0				5
19		42	0	42				0	3	0	3	45
20		64	0	64				0	50	11	39	103
21		133	0	133				0	38	0	38	171
22		402	50	352				0	156	44	112	464
23		370	110	260				0	121	34	87	347
24	2	40	0	40				0	136	49	87	129
25	6	121	0	121				0	63	0	63	190
26	10	76	50	26	309	668	509	159	29	16	13	208
27	9	15	0	15	1,197	1,645	687	958	17	14	3	985
28	19	10	0	10	197	257	82	175	7	0	7	211
29	15	0	0	0	128	231	412	0	11	0	11	0
Total	61	1,278	210	1,068	1,831	2,801	1,690	1,292	631	168	463	2,884

Appendix A. 2. Weekly harvest of Chinook salmon in the Canadian commercial, Telegraph Aboriginal, and recreational fishery in the Stikine River, 2011.

	LRCF													Canada tota
	Kept		Released		Estimated mortality (50%)		URCF		Aboriginal Telegraph		Tahltan sport fishery			large Stikin
SW	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Retained	Nonlarge	Total	harvest
20	106	16												106
21	169	42												169
22	78	27												78
23									1	2				1
24									21	5				21
25			0	1	0	1			98	45				98
26	386	327	11	22	6	11			76	8				468
27	260	170	2	14	1	7			172	65	18	7	18	451
28	560	548	32	47	16	24	2	14	58	33	18	8	18	654
29	96	76	0	7	0	4	0	0	38	26	17	8	17	151
30	63	40	3	3	2	2	0	0	21	11				86
31	9	12	0	5	0	3			21	6				30
32	4	2	2	1	1	1			6	12				11
33	4	0	8	0	4	0			3	5				11
34	2	0							0	0				2
35	0	0												0
36	0	0												0
37	0	0												0
Total kept	1,737	1,260	58	100	29	50	2	14	515	218	53	23	53	2,336
Total harvest	1,795	1,360												2,336
Total harvest + mortality	1,766	1,310												

Appendix A. 3. Weekly harvest of Chinook salmon in the Canadian test fisheries 2011.

	Drift		Set		Commercial license		Tuya		Total	
SW	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
19									0	0
20									0	0
21									0	0
22									0	0
23					136	33			136	33
24					314	84			314	84
25					348	103			348	103
26	8	13							8	13
27	8	11							8	11
28	2	1							2	1
29	3	2	0	1					3	3
30	0	1	0	0			6	2	6	3
31	1	0	0	0			7	4	8	4
32	0	0	0	0					0	0
33	0	0	0	0					0	0
34	0	0	0	0					0	0
35	0	0							0	0
36	0	0							0	0
37	0	0							0	0
38	0	0							0	0
39	0	0							0	0
40	0	0							0	0
41	0	0							0	0
42	0	0							0	0
Total	22	28	0	1	799	219	13	6	834	254

Appendix A. 4. Weekly harvest of sockeye salmon in the Alaskan District 106 and 108 fisheries, 2011.

Effort may be less than the sum of effort from 106-41&42 and 106-30 because some boats fished in more than one subdistrict.

			D106-30				D106-41/42				D108			
SW	Subsistence	D106 Total	Harvest	Permits	Days	Permit days	Harvest	Permits	Days	Permit days	Harvest	Permits	Days	Permit days
24														
25	39	2,030	481	25	2.0	50	1,549	50	2.0	100				0
26	146	12,689	2,072	22	3.0	66	10,617	42	3.0	126	5,360	32	3.0	96
27	266	32,120	5,775	18	4.0	72	26,345	42	4.0	168	19,983	49	4.0	196
28	525	18,465	4,482	27	4.0	108	13,983	44	4.0	176	10,699	48	4.0	192
29	495	13,836	5,471	29	2.0	58	8,365	36	2.0	72	4,954	30	2.0	60
30	225	11,844	6,227	33	2.0	66	5,617	25	2.0	50	4,279	61	3.0	183
31	25	13,290	5,041	29	2.0	58	8,249	30	2.0	60	3,147	72	3.0	216
32	16	18,455	10,071	41	3.0	123	8,384	40	3.0	120	1,550	65	3.0	195
33	3	17,749	12,205	49	3.0	147	5,544	31	3.0	93	930	57	3.0	171
34	0	2,061	836	21	2.0	42	1225	38	2.0	76	249	45	2.0	90
35	0	1,355	557	20	2.0	40	798	36	2.0	72	146	33	2.0	66
36	0	1,474	636	25	2.0	50	838	57	2.0	114	118	29	2.0	58
37	0	472	154	21	3.0	63	318	55	3.0	165	54	48	3.0	144
38	0	218	105	51	3.0	153	113	55	3.0	165	6	21	3.0	63
39	0	10	0	6	2.0	12	10	19	2.0	38	3	27	2.0	54
40	0	1	0	13	2.0		1	6	2.0	12	0	11	2.0	22
Total	1,740	146,069	54,113	430	41	1,108	91,956	606	41	1,607	51,478	628	41	1,806

Appendix A. 5. Weekly stock proportions of sockeye salmon harvested in the Alaskan D106 commercial drift gillnet fishery, 2011.

Estimates are based on scale pattern analysis

			Stikine						CPUE of Stikine Fish			
SW	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan	All Tahltan	Tuya	Mainstem	Total
25	0.637	0.043	0.101	0.162	0.056	0.320	0.099	0.002	0.020	0.046	0.019	0.028
26	0.490	0.126	0.223	0.125	0.035	0.384	0.135	0.088	0.223	0.177	0.057	0.165
27	0.485	0.053	0.244	0.148	0.071	0.462	0.120	0.124	0.486	0.416	0.231	0.397
28	0.658	0.162	0.064	0.089	0.028	0.181	0.048	0.016	0.063	0.123	0.045	0.077
29	0.769	0.067	0.058	0.043	0.063	0.164	0.031	0.028	0.095	0.100	0.168	0.116
30	0.790	0.094	0.030	0.050	0.035	0.116	0.016	0.015	0.048	0.112	0.091	0.079
31	0.799	0.123	0.035	0.001	0.043	0.078	0.009	0.026	0.060	0.001	0.119	0.057
32	0.831	0.108	0.002	0.001	0.059	0.062	0.002	0.000	0.003	0.002	0.117	0.032
33	0.844	0.120	0.001	0.005	0.029	0.036	0.001	0.000	0.002	0.009	0.059	0.019
34	0.774	0.114	0.000	0.015	0.097	0.112	0.000	0.000	0.000	0.006	0.042	0.013
35	0.806	0.092	0.000	0.015	0.088	0.103	0.000	0.000	0.000	0.004	0.027	0.008
36	0.807	0.093	0.000	0.015	0.086	0.101	0.000	0.000	0.000	0.003	0.019	0.006
37	0.801	0.087	0.000	0.016	0.096	0.112	0.000	0.000	0.000	0.001	0.005	0.002
38	0.809	0.095	0.000	0.014	0.081	0.095	0.000	0.000	0.000	0.000	0.001	0.000
39	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.000	0.001	0.000
40	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.689	0.101	0.094	0.066	0.050	0.211	0.051	0.043	0.431	0.305	0.264	1.000
25	1,294	87	206	329	114	649	201	5	1.4	2.2	0.8	4.3
26	6,218	1,604	2,834	1,589	443	4,867	1,714	1,121	15.0	8.4	2.3	25.7
27	15,568	1,708	7,830	4,740	2,275	14,845	3,850	3,979	32.6	19.7	9.5	61.9
28	12,142	2,984	1,183	1,640	516	3,339	895	288	4.2	5.9	1.8	11.9
29	10,635	927	805	598	871	2,274	424	381	6.4	4.7	6.9	18.0
30	9,360	1,110	360	595	419	1,374	184	177	3.2	5.3	3.7	12.3
31	10,614	1,639	465	7	565	1,037	115	351	4.0	0.1	4.9	8.9
32	15,332	1,992	40	18	1,093	1,151	40	0	0.2	0.1	4.8	5.0
33	14,988	2,124	26	94	516	637	26	0	0.1	0.4	2.4	3.0
34	1,595	236	0	30	199	230	0	0	0.0	0.3	1.7	2.0
35	1,092	124	0	20	119	139	0	0	0.0	0.2	1.1	1.3
36	1,189	137	0	22	127	148	0	0	0.0	0.1	0.8	0.9
37	378	41	0	8	45	53	0	0	0.0	0.0	0.2	0.2
38	176	21	0	3	18	21	0	0	0.0	0.0	0.1	0.1
39	8	1	0	0	1	1	0	0	0.0	0.0	0.0	0.0
40	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	100,590	14,734	13,750	9,693	7,323	30,765	7,449	6,301	67.1	47.5	41.1	155.7

Appendix A. 6. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2011.

Estimates are based on scale pattern analysis

			Stikine						CPUE of Stikine Fish			
SW	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan	All Tahltan	Tuya	Mainstem	Total
25	0.561	0.028	0.130	0.209	0.072	0.411	0.130	0.000	0.020	0.048	0.020	0.028
26	0.426	0.128	0.259	0.147	0.040	0.446	0.156	0.103	0.213	0.185	0.060	0.166
27	0.401	0.044	0.294	0.176	0.085	0.555	0.145	0.149	0.450	0.411	0.236	0.385
28	0.582	0.199	0.079	0.108	0.032	0.219	0.063	0.017	0.062	0.128	0.045	0.077
29	0.656	0.088	0.096	0.065	0.094	0.255	0.051	0.046	0.109	0.112	0.194	0.131
30	0.668	0.152	0.062	0.062	0.056	0.180	0.030	0.031	0.068	0.104	0.112	0.090
31	0.729	0.159	0.055	0.000	0.057	0.112	0.013	0.043	0.074	0.000	0.139	0.068
32	0.752	0.173	0.002	0.000	0.073	0.076	0.002	0.000	0.002	0.000	0.090	0.023
33	0.828	0.152	0.005	0.000	0.015	0.020	0.005	0.000	0.003	0.000	0.016	0.005
34	0.731	0.108	0.000	0.019	0.142	0.161	0.000	0.000	0.000	0.005	0.040	0.012
35	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.003	0.025	0.007
36	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.002	0.017	0.005
37	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.001	0.004	0.001
38	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.000	0.002	0.000
39	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.000	0.001	0.000
40	0.784	0.068	0.000	0.020	0.128	0.148	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.574	0.118	0.146	0.098	0.065	0.309	0.079	0.067	0.453	0.296	0.251	1.000
25	869	43	201	324	112	637	201	0	2.0	3.2	1.1	6.4
26	4,521	1,360	2,751	1,557	427	4,735	1,653	1,098	21.8	12.4	3.4	37.6
27	10,569	1,160	7,740	4,626	2,250	14,616	3,823	3,918	46.1	27.5	13.4	87.0
28	8,136	2,778	1,108	1,509	451	3,069	878	231	6.3	8.6	2.6	17.4
29	5,490	738	805	542	790	2,137	424	381	11.2	7.5	11.0	29.7
30	3,752	853	347	348	316	1,011	170	177	6.9	7.0	6.3	20.2
31	6,013	1,309	455	0	472	927	104	351	7.6	0.0	7.9	15.5
32	6,303	1,447	20	0	614	634	20	0	0.2	0.0	5.1	5.3
33	4,592	844	26	0	82	108	26	0	0.3	0.0	0.9	1.2
34	896	132	0	24	174	198	0	0	0.0	0.3	2.3	2.6
35	625	55	0	16	102	118	0	0	0.0	0.2	1.4	1.6
36	657	57	0	17	107	124	0	0	0.0	0.1	0.9	1.1
37	249	22	0	6	41	47	0	0	0.0	0.0	0.2	0.3
38	89	8	0	2	14	17	0	0	0.0	0.0	0.1	0.1
39	8	1	0	0	1	1	0	0	0.0	0.0	0.0	0.0
40	1	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	52,769	10,806	13,454	8,972	5,954	28,380	7,300	6,155	102.4	66.9	56.7	226.0

Appendix A. 7. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2011.

Estimates are based on scale pattern analysis

			Stikine						CPUE of Stikine Fish			
SW	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan	All Tahltan	Tuya	Mainstem	Total
25	0.884	0.090	0.009	0.011	0.005	0.026	0.000	0.009	0.024	0.011	0.004	0.009
26	0.819	0.118	0.040	0.015	0.008	0.063	0.029	0.011	0.331	0.051	0.017	0.073
27	0.866	0.095	0.015	0.020	0.004	0.040	0.005	0.011	0.324	0.168	0.025	0.116
28	0.894	0.046	0.017	0.029	0.014	0.060	0.004	0.013	0.180	0.130	0.042	0.091
29	0.940	0.035	0.000	0.010	0.015	0.025	0.000	0.000	0.000	0.102	0.099	0.086
30	0.901	0.041	0.002	0.040	0.016	0.058	0.002	0.000	0.054	0.399	0.109	0.201
31	0.913	0.065	0.002	0.001	0.018	0.022	0.002	0.000	0.045	0.013	0.113	0.069
32	0.897	0.054	0.002	0.002	0.048	0.051	0.002	0.000	0.042	0.016	0.275	0.154
33	0.852	0.105	0.000	0.008	0.036	0.043	0.000	0.000	0.000	0.068	0.209	0.131
34	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.017	0.043	0.028
35	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.012	0.030	0.020
36	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.011	0.027	0.018
37	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.002	0.005	0.003
38	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.001	0.001	0.001
39	0.837	0.124	0.000	0.008	0.030	0.038	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.884	0.073	0.005	0.013	0.025	0.044	0.003	0.003	0.140	0.343	0.517	1.000
25	425	43	5	5	3	12	0	5	0.1	0.1	0.1	0.2
26	1,697	244	84	31	16	131	61	23	1.3	0.5	0.2	2.0
27	4,999	548	89	113	26	228	28	62	1.2	1.6	0.4	3.2
28	4,006	206	74	131	65	270	18	57	0.7	1.2	0.6	2.5
29	5,144	190	0	56	81	137	0	0	0.0	1.0	1.4	2.4
30	5,608	257	14	247	102	363	14	0	0.2	3.7	1.5	5.5
31	4,601	330	10	7	93	110	10	0	0.2	0.1	1.6	1.9
32	9,029	545	20	18	479	517	20	0	0.2	0.1	3.9	4.2
33	10,396	1,280	0	94	434	528	0	0	0.0	0.6	3.0	3.6
34	700	104	0	7	25	32	0	0	0.0	0.2	0.6	0.8
35	466	69	0	5	17	21	0	0	0.0	0.1	0.4	0.5
36	532	79	0	5	19	24	0	0	0.0	0.1	0.4	0.5
37	129	19	0	1	5	6	0	0	0.0	0.0	0.1	0.1
38	88	13	0	1	3	4	0	0	0.0	0.0	0.0	0.0
39	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
40												
Total	47,820	3,928	296	721	1,368	2,385	150	146	3.8	9.4	14.2	27.4

Appendix A. 8. Weekly stock proportions sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2011.

Estimates are based on scale pattern analysis

			Stikine						CPUE of Stikine Fish			
SW	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan	All Tahltan	Tuya	Mainstem	Total
25						0.000		0.000				
26	0.047	0.011	0.753	0.114	0.074	0.942	0.323	0.430	0.272	0.132	0.052	0.186
27	0.133	0.019	0.615	0.185	0.047	0.848	0.268	0.348	0.406	0.392	0.061	0.306
28	0.126	0.072	0.418	0.181	0.204	0.803	0.161	0.257	0.151	0.209	0.143	0.158
29	0.244	0.050	0.271	0.129	0.306	0.706	0.117	0.154	0.145	0.221	0.318	0.206
30	0.177	0.102	0.090	0.078	0.553	0.721	0.042	0.048	0.014	0.038	0.163	0.060
31	0.188	0.054	0.072	0.018	0.669	0.758	0.038	0.034	0.007	0.005	0.123	0.039
32	0.401	0.026	0.050	0.009	0.514	0.573	0.050	0.000	0.003	0.001	0.051	0.016
33	0.376	0.034	0.065	0.010	0.516	0.591	0.065	0.000	0.002	0.001	0.035	0.011
34	0.350	0.034	0.067	0.007	0.542	0.616	0.067	0.000	0.001	0.000	0.019	0.006
35	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.017	0.005
36	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.015	0.004
37	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.003	0.001
38	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.001	0.000
39	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.000	0.000
40	0.350	0.034	0.012	0.007	0.596	0.616	0.000	0.012	0.000	0.000	0.000	0.000
Total	0.155	0.042	0.445	0.142	0.216	0.803	0.191	0.254	0.547	0.171	0.282	1.000
25	0	0	0	0	0	0	0	0				
26	252	60	4,037	613	398	5,048	1,730	2,307	42.1	6.4	4.1	52.6
27	2,658	371	12,299	3,706	949	16,953	5,353	6,946	62.7	18.9	4.8	86.5
28	1,344	765	4,471	1,934	2,186	8,590	1,719	2,752	23.3	10.1	11.4	44.7
29	1,208	250	1,341	639	1,515	3,496	580	762	22.4	10.7	25.3	58.3
30	758	436	384	333	2,368	3,085	178	205	2.1	1.8	12.9	16.9
31	592	169	226	56	2,105	2,386	119	106	1.0	0.3	9.7	11.0
32	622	41	77	14	796	888	77	0	0.4	0.1	4.1	4.6
33	349	32	61	9	480	549	61	0	0.4	0.1	2.8	3.2
34	87	9	17	2	135	153	17	0	0.2	0.0	1.5	1.7
35	51	5	2	1	87	90	0	2	0.0	0.0	1.3	1.4
36	41	4	1	1	70	73	0	1	0.0	0.0	1.2	1.3
37	19	2	1	0	32	33	0	1	0.0	0.0	0.2	0.2
38	2	0	0	0	4	4	0	0	0.0	0.0	0.1	0.1
39	1	0	0	0	2	2	0	0	0.0	0.0	0.0	0.0
40	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	7,985	2,143	22,916	7,307	11,127	41,351	9,834	13,083	154.6	48.3	79.5	282.4

Appendix A. 9. Weekly sockeye salmon harvest and effort in the Canadian commercial and assessment fisheries in the lower Stikine River, 2011.

	LRCF					Telegraph	Drift Net Test		Set Net Test		Conmercial Liscense		Test	Commercial
SW	Harvest	Permits	Days	Permit days	URCF	Aboriginal	Harvest	# drifts	Harvest	hours	Harvest	Permits	Total	Total
19				0.0									0	0
20				0.0									0	0
21				0.0									0	0
22				0.0									0	0
23				0.0		0					1	19	1	0
24				0.0		0					0	19	0	0
25				0.0		13					20	19	20	13
26	3,484	19.0	2.0	38.0		7	38	42					38	3491
27	3,870	17.0	3.0	51.0		158	112	42					112	4028
28	18,564	17.2	5.0	86.0	29	1,034	54	21					54	19627
29	4,930	17.0	2.0	34.0	376	2,579	115	63	763	86.5			878	7885
30	6,779	18.3	3.0	55.0	567	1,706	93	42	695	72.0			788	9052
31	3,431	18.5	2.0	37.0		820	97	42	432	57.5			529	4251
32	4,069	19.0	3.0	57.0		407	41	42	161	23.5			202	4476
33	1,642	18.0	2.0	36.0		156	30	56	190	48.0			220	1798
34	482	15.0	3.0	45.0		13	5	42	54	47.9			59	495
35	102	5.6	7.0	39.0			3	56					3	102
36	220	12	7	87.0			2	42					2	220
37	2	7	2	14.0			0	42	55	38.0			93	2
38							0	42	37	51.0			88	0
39							0	98	57	86.0			143	0
40							0	84	36	175.0			211	0
41							0	84	45	230.0			45	0
42							0	42					0	0
Total	47,575		41.0	579.0	972	6,893	590	882	2,525	915	21	57	3,486	55,440

Appendix A. 10. Weekly sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery in the lower Stikine River, 2011.

	Porportion					Harvest				
SW	Small Egg	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
19						0.00	0.00	0.00	0.00	0.00
20						0.00	0.00	0.00	0.00	0.00
21						0.00	0.00	0.00	0.00	0.00
22						0.00	0.00	0.00	0.00	0.00
23						0.00	0.00	0.00	0.00	0.00
24						0	0	0	0	0
25	0.930	0.793	0.186	0.021	0.303	0	0	0	0	0
26	0.933	0.793	0.186	0.021	0.303	2,763	648	73	1,707	1,056
27	0.981	0.744	0.210	0.046	0.310	2,878	814	177	1,679	1,200
28	0.936	0.632	0.265	0.103	0.228	11,724	4,928	1,912	7,500	4,225
29	0.772	0.446	0.335	0.219	0.207	2,200	1,653	1,078	1,180	1,019
30	0.543	0.380	0.223	0.397	0.150	2,578	1,511	2,689	1,563	1,015
31	0.250	0.251	0.090	0.659	0.057	860	309	2,262	664	196
32	0.147	0.115	0.045	0.840	0.041	467	183	3,419	300	166
33	0.129	0.035	0.033	0.932	0.029	57	55	1,530	9	48
34	0.100	0.008	0.010	0.981	0.000	4	5	473	4	0
35	0.000	0.000	0.000	1.000	0.000	0	0	102	0	0
36	0.000	0.000	0.000	1.000	0.000	0	0	220	0	0
37	0.000	0.000	0.000	1.000	0.000	0	0	2	0	0
Total						23,530	10,106	13,939	14,606	8,924
Proportion						0.495	0.212	0.293	0.307	0.188

	Harvest/Effort below Porcupine		CPUE						
SW	Sockeye	Permit Day	Total	Small Egg	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
19	0	0.0							
20	0	0.0							
21	0	0.0							
22	0	0.0							
23	0	0.0							
24	0	0.0							
25	0	0.0							
26	3,484	38.0	91.684	85.531	72.703	17.054	1.927	44.920	27.783
27	3,870	51.0	75.882	74.414	56.436	15.968	3.478	32.913	23.524
28	18,564	86.0	215.860	202.100	136.326	57.302	22.233	87.203	49.122
29	4,930	34.0	145.000	111.962	64.693	48.608	31.699	34.717	29.976
30	6,779	55.0	123.277	66.983	46.888	27.482	48.907	28.424	18.464
31	3,431	37.0	92.730	23.182	23.236	8.349	61.144	17.951	5.285
32	4,069	57.0	71.386	10.470	8.184	3.212	59.989	5.271	2.914
33	1,642	36.0	45.611	5.895	1.583	1.528	42.500	0.253	1.330
34	482	45.0	10.711	1.071	0.089	0.111	10.511	0.089	0.000
35	102	39.0	2.616	0.000	0.000	0.000	2.616	0.000	0.000
36	220	87.0	2.528	0.000	0.000	0.000	2.528	0.000	0.000
37	2	14.0	0.143	0.000	0.000	0.000	0.143	0.000	0.000
Total	47,575	579	877.43	581.61	410.14	179.61	287.68	251.74	158.40
Proportion				0.663	0.467	0.205	0.328	0.287	0.181

Appendix A. 11. Harvest by stock and week for sockeye salmon in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2011.

	Stock				
SW	All Tahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
Proportion by stock for upper river fisheries					
24	0.679	0.154	0.167	0.449	0.231
25	0.679	0.154	0.167	0.449	0.231
26	0.679	0.154	0.167	0.449	0.231
27	0.679	0.154	0.167	0.449	0.231
28	0.743	0.161	0.095	0.520	0.224
29	0.633	0.308	0.059	0.421	0.212
30	0.705	0.281	0.014	0.444	0.260
31	0.630	0.370	0.000	0.432	0.198
32	0.619	0.355	0.026	0.404	0.215
33	0.767	0.233	0.000	0.600	0.167
34	0.629	0.371	0.000	0.429	0.200
Total					
Harvest by stock for upper river commercial fishery					
28	22	5	3	15	6
29	238	116	22	158	80
30	400	159	8	252	148
Total	659	280	33	425	234
Harvest by stock for Telegraph Aboriginal fishery					
24	0	0	0	0	0
25	9	2	2	6	3
26	5	1	1	3	2
27	107	24	26	71	36
28	769	167	98	537	231
29	1,632	794	153	1,087	546
30	1,202	480	24	758	444
31	516	304	0	354	162
32	252	145	11	164	87
33	120	36	0	94	26
34	8	5	0	6	3
35	0	0	0	0	0
Total	4,620	1,957	316	3,080	1,540

Appendix A. 12. Weekly harvest, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2011.

Sex specific age compositions were and the stock composition of the females sampled for egg diameters was expanded to the harvest by age.

If no fishery, a proxy in SW 25-27 was based on the rate of change from the LRCF.

		Proportions				Harvest				CPUE				Migratory Timing		
SW	smallegg	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	Total	AllTahltan	Tuya	Mainstem
Drift gillnet																
25		0.895	0.053	0.053						0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	0.880	0.895	0.053	0.053	0.158	52	3	3	8	0.810	0.048	0.048	0.905	0.057	0.003	0.003
27	0.897	0.634	0.196	0.170	0.306	71	22	19	34	1.690	0.524	0.452	2.667	0.119	0.037	0.032
28	0.793	0.481	0.241	0.278	0.188	26	13	15	10	1.238	0.619	0.714	2.571	0.087	0.044	0.050
29	0.662	0.360	0.278	0.362	0.187	41	32	42	22	0.657	0.507	0.661	1.825	0.046	0.036	0.046
30	0.454	0.306	0.143	0.551	0.109	28	13	51	10	0.677	0.318	1.220	2.214	0.048	0.022	0.086
31	0.183	0.168	0.130	0.701	0.070	16	13	68	7	0.389	0.301	1.620	2.310	0.027	0.021	0.114
32	0.118	0.129	0.035	0.837	0.040	5	1	34	2	0.126	0.034	0.817	0.976	0.009	0.002	0.057
33	0.141	0.077	0.027	0.895	0.050	2	1	27	2	0.041	0.015	0.480	0.536	0.003	0.001	0.034
34	0.220	0.047	0.078	0.875	0.030	0	0	4	0	0.006	0.009	0.104	0.119	0.000	0.001	0.007
35	0.000	0.000	0.000	1.000	0.000	0	0	3	0	0.000	0.000	0.054	0.054	0.000	0.000	0.004
36	0.000	0.000	0.000	1.000	0.000	0	0	2	0	0.000	0.000	0.048	0.048	0.000	0.000	0.003
37						0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38						0	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total						243	99	268	94	5.633	2.374	6.216	14.224			
Proportion						0.398	0.162	0.440						0.396	0.167	0.437
Set gillnet																
29		0.360	0.278	0.362	0.187	275	212	276	143	3.175	2.451	3.195	8.821	0.084	0.065	0.064
30		0.306	0.143	0.551	0.109	213	100	383	76	2.932	1.384	5.316	9.653	0.078	0.037	0.140
31		0.168	0.130	0.701	0.070	73	56	303	30	1.264	0.980	5.269	7.513	0.033	0.026	0.139
32		0.129	0.035	0.837	0.040	21	6	135	6	0.882	0.237	5.732	6.851	0.023	0.006	0.151
33		0.077	0.027	0.895	0.050	15	5	170	10	0.306	0.108	3.545	3.958	0.008	0.003	0.093
34		0.047	0.078	0.875	0.030	3	4	47	2	0.033	0.108	0.986	1.127	0.001	0.002	0.026
35																
36																
37		0.000	0.000	1.000	0.000	0	0	55	0	0.000	0.000	1.447	1.447	0.000	0.000	0.038
38		0.000	0.000	1.000	0.000	0	0	37	0	0.000	0.000	0.725	0.725	0.000	0.000	0.019
39		0.000	0.000	1.000	0.000	0	0	57	0	0.000	0.000	0.663	0.663	0.000	0.000	0.017
40		0.000	0.000	1.000	0.000	0	0	36	0	0.000	0.000	0.206	0.206	0.000	0.000	0.005
41		0.000	0.000	1.000	0.000	0	0	45	0	0.000	0.000	0.196	0.196	0.000	0.000	0.005
Total						598	383	1,544	266	8.63	5.25	24.04	37.92			
Proportion						0.237	0.152	0.612						0.228	0.138	0.634
Total Test Fishery Harvest																
25		0.895	0.053	0.053	0.000	0	0	0	0							
26		0.895	0.053	0.053	0.158	52	3	3	8							
27		0.634	0.196	0.170	0.306	71	22	19	34							
28		0.481	0.241	0.278	0.188	26	13	15	10							
29		0.360	0.278	0.362	0.187	316	244	318	164							
30		0.306	0.143	0.551	0.109	241	113	434	86							
31		0.168	0.130	0.701	0.070	89	69	371	37							
32		0.129	0.035	0.837	0.040	26	7	169	8							
33		0.077	0.027	0.895	0.050	17	6	197	11							
34		0.047	0.078	0.875	0.030	3	5	52	2							
35		0.000	0.000	1.000	0.000	0	0	3	0							
36		0.000	0.000	1.000	0.000	0	0	2	0							
37		0.000	0.000	1.000	0.000	0	0	55	0							
38		0.000	0.000	1.000	0.000	0	0	37	0							
39		0.000	0.000	1.000	0.000	0	0	57	0							
40		0.000	0.000	1.000	0.000	0	0	36	0							
41		0.000	0.000	1.000	0.000	0	0	45	0							
Total						841	482	1,813	361							
Proportion						0.268	0.154	0.578	0.115							

AllTahltan harvest		TahltanEnhance	WildTahltan
28			
29	0.360	0.187	0.173
30	0.306	0.109	0.197
31	0.168	0.070	0.098
32	0.129	0.040	0.089
33	0.077	0.050	0.027
34	0.047	0.030	0.017
35			

Appendix A. 13. Daily test harvest taken from the Tuya Assessment Fishery located above the Tahltan River, July 2011.

	Harvest	Proportions				Stock specific harvest			
Date	Total	All Tahltan	Tuya	Mainstem	TahktanEnhance	All Tahltan	Tuya	Mainstem	TahltanEnhance
7/22	240	0.343	0.568	0.089	0.127	82	136	21	30
7/23	360	0.343	0.568	0.089	0.127	124	204	32	46
7/24	412	0.343	0.568	0.089	0.127	141	234	37	52
7/25	404	0.343	0.568	0.089	0.127	139	229	36	51
7/26	385	0.343	0.568	0.089	0.127	132	219	34	49
7/27	297	0.343	0.568	0.089	0.127	102	169	26	38
7/28	266	0.343	0.568	0.089	0.127	91	151	24	34
7/29	263	0.343	0.568	0.089	0.127	90	149	23	33
7/30	251	0.343	0.568	0.089	0.127	86	142	22	32
Total	2,878	0.343	0.568	0.089	0.127	988	1,634	257	365

Appendix A. 14. Weekly coho salmon harvest in the Alaskan District 106 and 108 fisheries, 2011.

	D106					D108			Subsistence
SW	Hatchery	Wild	Total	106-41/42	106-30	Hatchery	Wild	Total	harvest
25	2,187	1,370	3,557	1,976	1,581		39	39	0
26	5,961	834	6,795	3,806	2,989	254	139	393	0
27	14,716	3,974	18,690	12,148	6,542	0	521	521	0
28	12,115	3,232	15,347	8,747	6,600	295	419	714	1
29	5,205	2,718	7,923	4,485	3,438	56	735	791	0
30	4,022	1,231	5,253	1,854	3,399	121	1,460	1,581	0
31	2,206	2,568	4,774	2,681	2,093	55	1,461	1,516	0
32	2,156	4,208	6,364	2,879	3,485	104	2,305	2,409	0
33	2,415	4,225	6,640	2,745	3,895	58	1,166	1,224	9
34	267	2,687	2,954	2,058	896	152	1,245	1,397	0
35	563	3,133	3,696	2,771	925	132	2,541	2,673	0
36	881	6,987	7,868	6,204	1,664	231	3,332	3,563	20
37	2,504	6,849	9,353	7,670	1,683	67	1,860	1,927	0
38	2,685	12,306	14,991	8,150	6,841	481	1,093	1,574	10
39	706	1,305	2,011	1,732	279	160	238	398	0
40	426	1,218	1,644	447	1,197				0
Total	59,015	58,845	117,860	70,353	47,507	2,166	18,554	20,720	40

Appendix A. 15. Weekly harvest of coho salmon in the Canadian lower river commercial fishery and test fisheries 2011.

		Assessment/Test			
SW	LRCF	Drift	Set	Additional	Total
19					0
20	0				0
21	0				0
22	0				0
23					0
24					0
25	0				0
26	0	0			0
27	0	0			0
28	1	0			1
29	3	0	0		3
30	2	0	0		2
31	6	0	3		9
32	189	6	8		203
33	339	31	69		439
34	637	13	50		700
35	618	4			622
36	3,645	40			3,685
37	381	11			392
38		11			11
39		21			21
40		83			83
41		47			47
42		13			13
Total	5,821	280	130	0	6,231

Appendix A. 16. Weekly salmon effort in the Alaskan District 106 and 108 fisheries, 2011.

Effort may be less than the sum of effort from 106-41&42 and 106-30 because some boats fished in more than one subdistrict.

		D106			106-41/42			106-30			D108			
SW	Start Date	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Subsistence Permits
18	24-Apr			0			0			0			0	
19	1-May			0			0			0			0	
20	8-May			0			0			0			0	
21	15-May			0			0			0			0	
22	22-May			0			0			0			0	
23	29-May			0			0			0			0	
24	5-Jun			0			0			0			0	
25	12-Jun	75	2.0	150	50	2.0	100	25	2.0	50	32	3.0	96	
26	19-Jun	63	3.0	189	42	3.0	126	22	3.0	66	49	4.0	196	
27	26-Jun	60	4.0	240	42	4.0	168	18	4.0	72	48	4.0	192	
28	3-Jul	70	4.0	280	44	4.0	176	27	4.0	108	30	2.0	60	
29	10-Jul	63	2.0	126	36	2.0	72	29	2.0	58	61	3.0	176	
30	17-Jul	56	2.0	112	25	2.0	50	33	2.0	66	72	3.0	150	
31	24-Jul	58	2.0	116	30	2.0	60	29	2.0	58	65	3.0	195	
32	31-Jul	76	3.0	228	40	3.0	120	41	3.0	123	57	3.0	171	
33	7-Aug	71	3.0	213	31	3.0	93	49	3.0	147	45	2.0	90	
34	14-Aug	58	2.0	116	38	2.0	76	21	2.0	42	33	2.0	66	
35	21-Aug	54	2.0	108	36	2.0	72	20	2.0	40	29	2.0	58	
36	28-Aug	80	2.0	160	57	2.0	114	25	2.0	50	48	3.0	144	
37	4-Sep	73	3.0	219	55	3.0	165	21	3.0	63	21	3.0	63	
38	11-Sep	101	3.0	303	55	3.0	165	51	3.0	153	27	2.0	54	
39	18-Sep	25	2.0	50	19	2.0	38	6	2.0	12	11	2.0	22	
40	25-Sep	19	2.0	38	6	2.0	12	13	2.0	26			0	
42	9-Oct													
Total			41	2,648		41	1,607		41	1,134		41	1,733	124

Appendix A. 17. Weekly salmon effort in the Canadian fisheries in the Stikine River, 2011.

		LRCF			URCF			Telegraph Aboriginal			Test	
SW	Start Date	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	# Drifts	Set hours
19*	1-May			0								
20*	8-May	18.00	1.3	23								
21*	15-May	19.00	1.0	19						0		
22*	22-May	16.00	2.0	32						0		
23*	29-May	19.00	1.2	22				1.0	2.0	2		
24*	5-Jun	19.00	0.8	14				2.1	7.0	15		
25	12-Jun	19.00	0.5	10				5.6	7.0	39		
26	19-Jun	19.00	2.0	38				2.9	7.0	20	42	
27	26-Jun	17.00	3.0	51				5.0	7.0	35	42	
28	3-Jul	17.20	5.0	86	1.0	3.0	3	7.7	7.0	54	21	
29	10-Jul	17.00	2.0	34	1.0	3.0	3	18.3	7.0	128	63	86.5
30	17-Jul	18.33	3.0	55	2.0	3.0	6	12.9	7.0	90	42	72.0
31	24-Jul	18.50	2.0	37				7.1	7.0	50	42	57.5
32	31-Jul	19.00	3.0	57				4.1	7.0	29	42	23.5
33	7-Aug	18.00	2.0	36				1.7	7.0	12	56	48.0
34	14-Aug	15.00	3.6	45				2.0	1.0		42	47.9
35	21-Aug	5.57	7.0	39							56	
36	28-Aug	12.43	7.0	87							42	
37	4-Sep	7.00	2.0	14							42	
38	11-Sep			0							42	
39	18-Sep			0							98	
40	25-Sep			0							84	
41	2-Oct			0							84	
42	9-Oct			0							42	
Total			47.7	698.4		9.0	12.0		73.0	473.9	882.0	335.4

* fishing prosecuted as a test fishery

Appendix A. 18. Tuya assessment fishery, 2011.

Date	total nets
7/21	8
7/22	8
7/23	8
7/24	8
7/25	8
7/26	8
7/27	8
7/28	8
7/29	8
7/30	8
Total	80

Appendix A. 19. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2011.

		Cumulative				Cumulative	
Date	Count [a]	Count	Percent	Date	Count	Count	Percent
7-Jul				13-Aug	39	32,959	95.29%
8-Jul				14-Aug	312	33,271	96.19%
9-Jul	Installed			15-Aug	120	33,391	96.54%
10-Jul	0	0	0.00%	16-Aug	61	33,452	96.72%
11-Jul	0	0	0.00%	17-Aug	101	33,553	97.01%
12-Jul	0	0	0.00%	18-Aug	44	33,597	97.13%
13-Jul	3,923	3,923	11.34%	19-Aug	51	33,648	97.28%
14-Jul	5,163	9,086	26.27%	20-Aug	56	33,704	97.44%
15-Jul	3,304	12,390	35.82%	21-Aug	110	33,814	97.76%
16-Jul	2,975	15,365	44.42%	22-Aug	47	33,861	97.90%
17-Jul	1,665	17,030	49.24%	23-Aug	41	33,902	98.02%
18-Jul	2,115	19,145	55.35%	24-Aug	4	33,906	98.03%
19-Jul	1,436	20,581	59.50%	25-Aug	47	33,953	98.16%
20-Jul	359	20,940	60.54%	26-Aug	317	34,270	99.08%
21-Jul	928	21,868	63.22%	27-Aug	169	34,439	99.57%
22-Jul	1,365	23,233	67.17%	28-Aug	17	34,456	99.62%
23-Jul	513	23,746	68.65%	29-Aug	101	34,557	99.91%
24-Jul	849	24,595	71.11%	30-Aug	14	34,571	99.95%
25-Jul	184	24,779	71.64%	31-Aug	11	34,582	99.98%
26-Jul	537	25,316	73.19%	1-Sep	6	34,588	100.00%
27-Jul	407	25,723	74.37%	2-Sep	0	34,588	100.00%
28-Jul	448	26,171	75.66%	3-Sep	0	34,588	100.00%
29-Jul	916	27,087	78.31%	4-Sep	0	34,588	100.00%
30-Jul	328	27,415	79.26%	5-Sep	0	34,588	100.00%
31-Jul	810	28,225	81.60%	6-Sep	0	34,588	100.00%
1-Aug	576	28,801	83.27%	7-Sep	0	34,588	100.00%
2-Aug	356	29,157	84.30%	8-Sep	0	34,588	100.00%
3-Aug	572	29,729	85.95%	9-Sep	0	34,588	100.00%
4-Aug	261	29,990	86.71%	10-Sep	0	34,588	100.00%
5-Aug	250	30,240	87.43%	11-Sep	0	34,588	100.00%
6-Aug	783	31,023	89.69%	12-Sep	0	34,588	100.00%
7-Aug	261	31,284	90.45%	13-Sep	0	34,588	100.00%
8-Aug	690	31,974	92.44%	14-Sep	0	34,588	100.00%
9-Aug	434	32,408	93.70%	15-Sep	Pulled		
10-Aug	176	32,584	94.21%				
11-Aug	184	32,768	94.74%				
12-Aug	152	32,920	95.18%				

	%enhanced	Hatchery[a]	Wild	Total
Total Counted		12,123	22,465	34,588
Fish removed for broodstock	0.388	1,769	2,790	4,559
Fish removed for otolith samples	0.313	106	234	340
Total Spawners		10,248	19,441	29,689

[a] Thermal mark contribution from pooled brood stock and weir sample otolith results.

Appendix A. 20. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2011.

		Cumulative				Cumulative	
Date	Count	Count	Percent	Date	Count	Count	Percent
7-May	Installed						
8-May	0	0	0.00%	6-Jun	1,209	1,530,133	93.75%
9-May	0	0	0.00%	7-Jun	26,295	1,556,428	95.36%
10-May	0	0	0.00%	8-Jun	16,143	1,572,571	96.35%
11-May	0	0	0.00%	9-Jun	36,590	1,609,161	98.59%
12-May	0	0	0.00%	10-Jun	17,164	1,626,325	99.65%
13-May	0	0	0.00%	11-Jun	1,795	1,628,120	99.75%
14-May	0	0	0.00%	12-Jun	1,976	1,630,096	99.88%
15-May	0	0	0.00%	13-Jun	1,531	1,631,627	99.97%
16-May	0	0	0.00%	14-Jun	446	1,632,073	100.00%
17-May	4	4	0.00%	15-Jun	46	1,632,119	100.00%
18-May	51,634	51,638	3.16%				
19-May	285,233	336,871	20.64%				
20-May	97,267	434,138	26.60%				
21-May	8,242	442,380	27.10%				
22-May	832	443,212	27.16%				
23-May	726	443,938	27.20%				
24-May	456	444,394	27.23%				
25-May	26,983	471,377	28.88%				
26-May	867,906	1,339,283	82.06%				
27-May	90,042	1,429,325	87.57%				
28-May	7,624	1,436,949	88.04%				
29-May	3,467	1,440,416	88.25%				
30-May	5,775	1,446,191	88.61%				
31-May	7,011	1,453,202	89.04%				
1-Jun	18,304	1,471,506	90.16%				
2-Jun	22,683	1,494,189	91.55%				
3-Jun	2,962	1,497,151	91.73%				
4-Jun	782	1,497,933	91.78%	Wild	960,531		
5-Jun	30,991	1,528,924	93.68%	Hatchery	671,588		
Total					1,632,119		

Appendix A. 21. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2011.

	Large Chinook			nonlarge Chinook		
		Cumulative			Cumulative	
Date	Count	Count	Percent	Count	Count	Percent
19-Jun	Installed					
20-Jun	0	0	0.00%	0	0	0.00%
21-Jun	0	0	0.00%	0	0	0.00%
22-Jun	0	0	0.00%	0	0	0.00%
23-Jun	0	0	0.00%	0	0	0.00%
24-Jun	9	9	0.51%	0	0	0.00%
25-Jun	12	21	1.20%	0	0	0.00%
26-Jun	0	21	1.20%	0	0	0.00%
27-Jun	2	23	1.31%	0	0	0.00%
28-Jun	0	23	1.31%	0	0	0.00%
29-Jun	0	23	1.31%	0	0	0.00%
30-Jun	0	23	1.31%	0	0	0.00%
1-Jul	0	23	1.31%	0	0	0.00%
2-Jul	0	23	1.31%	0	0	0.00%
3-Jul	0	23	1.31%	0	0	0.00%
4-Jul	1	24	1.37%	0	0	0.00%
5-Jul	0	24	1.37%	0	0	0.00%
6-Jul	0	24	1.37%	0	0	0.00%
7-Jul	1	25	1.43%	0	0	0.00%
8-Jul	2	27	1.54%	0	0	0.00%
9-Jul	2	29	1.65%	0	0	0.00%
10-Jul	5	34	1.94%	0	0	0.00%
11-Jul	22	56	3.19%	1	1	0.52%
12-Jul	20	76	4.34%	2	3	1.55%
13-Jul	0	76	4.34%	1	4	2.06%
14-Jul	15	91	5.19%	3	7	3.61%
15-Jul	17	108	6.16%	5	12	6.19%
16-Jul	40	148	8.44%	4	16	8.25%
17-Jul	34	182	10.38%	3	19	9.79%
18-Jul	16	198	11.29%	5	24	12.37%
19-Jul	12	210	11.98%	3	27	13.92%
20-Jul	9	219	12.49%	1	28	14.43%
21-Jul	56	275	15.69%	2	30	15.46%
22-Jul	214	489	27.90%	14	44	22.68%
23-Jul	324	813	46.38%	15	59	30.41%
24-Jul	123	936	53.39%	10	69	35.57%
25-Jul	15	951	54.25%	11	80	41.24%
26-Jul	98	1,049	59.84%	11	91	46.91%
27-Jul	24	1,073	61.21%	2	93	47.94%
28-Jul	11	1,084	61.84%	5	98	50.52%
29-Jul	7	1,091	62.24%	4	102	52.58%
30-Jul	154	1,245	71.02%	21	123	63.40%
31-Jul	104	1,349	76.95%	14	137	70.62%
1-Aug	45	1,394	79.52%	15	152	78.35%
2-Aug	103	1,497	85.40%	10	162	83.51%
3-Aug	1	1,498	85.45%	0	162	83.51%
4-Aug	171	1,669	95.21%	14	176	90.72%
5-Aug	20	1,689	96.35%	4	180	92.78%
6-Aug	16	1,705	97.26%	1	181	93.30%
7-Aug	45	1,750	99.83%	10	191	98.45%
8-Aug	3	1,753	100.00%	3	194	100.00%
Total Counted		1,753			194	
Broodstock		0			0	
Escapement		1,753			194	

Appendix B. 1. Historic salmon harvest and effort in the Alaskan District 106 commercial gillnet fishery, 1960–2011.

	Harvest							Effort
Year	Chinook	Sockeye	Coho	Pink	Chum	Boats	Days Open	Permit Days
1960	46	10,354	336	1,246	502			
1961	416	20,614	14,934	124,236	64,479			
1962	1,308	47,033	42,276	256,620	59,119			
1963	1,560	80,767	52,103	514,596	90,103			
1964	2,082	76,541	64,654	443,086	44,218			
1965	1,802	87,749	75,728	625,848	27,658			
1966	1,665	89,847	62,823	400,932	40,756			
1967	1,318	86,385	17,670	91,609	26,370			
1968	1,316	64,671	67,151	169,107	61,366			
1969	877	70,484	10,305	198,785	10,930	613	31.0	2,111
1970	782	42,809	35,188	95,173	32,245	586	41.0	1,863
1971	1,336	53,262	48,085	528,737	37,682	897	50.0	2,773
1972	2,548	101,958	92,283	89,510	72,389	1,090	42.0	3,320
1973	1,961	72,025	38,147	304,536	87,704	1,244	26.0	3,299
1974	1,929	57,498	45,595	104,596	50,402	1,216	28.0	2,178
1975	2,587	32,099	30,962	203,031	24,047	856	17.0	1,648
1976	386	15,493	19,126	139,641	6,868	375	22.0	827
1977	671	67,394	8,389	422,955	13,311	449	28.0	1,381
1978	2,682	41,574	55,578	224,715	16,545	791	26.5	1,509
1979	2,720	66,373	31,454	648,212	35,507	1,162	25.0	2,702
1980	580	107,422	16,666	45,662	26,291	591	25.0	1,324
1981	1,565	182,001	22,614	437,573	34,296	1,160	26.0	2,925
1982	1,648	193,801	31,584	25,533	18,646	831	23.0	1,699
1983	567	48,842	62,442	208,290	20,144	728	32.0	1,452
1984	892	91,653	41,359	343,255	70,303	763	32.0	1,814
1985	1,687	264,987	91,188	584,953	69,673	1,196	32.0	2,672
1986	1,704	145,709	194,912	308,484	82,289	1,530	32.0	3,509
1987	836	136,427	34,534	243,482	42,025	982	20.0	1,766
1988	1,104	92,529	13,103	69,559	69,620	830	19.0	1,494
1989	1,544	192,734	92,385	1,101,194	67,351	1,253	34.0	3,221
1990	2,108	185,805	164,235	319,186	73,232	1,476	34.0	3,501
1991	2,055	144,104	198,160	133,566	124,630	1,554	39.0	3,620
1992	1,355	203,155	298,935	94,248	140,468	1,543	40.0	4,229
1993	992	205,955	231,038	537,960	134,601	1,772	38.0	4,352
1994	754	211,048	267,862	179,994	176,026	1,593	43.0	4,467
1995	951	207,298	170,561	448,163	300,078	1,517	34.0	3,656
1996	644	311,100	223,640	188,035	283,290	1,661	46.0	5,289
1997	1,075	168,518	77,550	789,051	186,456	1,357	39.0	3,667
1998	518	113,435	273,197	502,655	332,022	1,586	43.0	4,397
1999	518	104,835	203,301	491,179	448,409	1,609	49.0	4,854
2000	1,220	90,076	96,207	156,619	199,836	1,016	33.0	2,408
2001	1,138	164,013	188,465	825,447	283,462	1,291	50.0	3,853
2002	446	56,135	226,560	82,951	112,541	1,009	47.0	2,683
2003	422	116,904	212,057	470,697	300,253	1,095	59.0	3,803
2004	2,735	116,259	138,631	245,237	110,574	848	55.0	2,735
2005	1,572	110,192	114,440	461,187	198,564	947	53.0	2,963
2006	1,948	91,980	69,015	149,907	268,436	728	45.0	2,035
2007	2,144	92,481	80,573	383,355	297,998	913	49.0	2,740
2008	1,619	30,533	116,074	90,217	102,156	734	46.0	2,195
2009	2,138	111,984	144,569	143,589	287,707	1,122	45.0	3,252
2010	2,473	112,450	225,550	309,795	97,948	1,187	47.0	3,161
2011	3,008	146,069	117,860	337,169	158,096	1,002	41.0	2,647
60-10	1,391	109,594	100,676	312,906	112,971		37	2,842
01-10	1,623	99,364	146,558	301,727	205,407	990	48	2,894

Appendix B. 2 Historic salmon harvest and effort in the Alaskan District 108 commercial gillnet fishery, 1962–2011.

			Harvest				Days	Effort Permit
Year	Chinook	Sockeye	Coho	Pink	Chum	Boats	Open	Days
1962	618	4,430	3,921	2,889	2,035			
1963	1,431	9,979	11,612	10,198	11,024			
1964	2,911	20,299	29,388	114,555	10,771			
1965	3,106	21,419	8,301	4,729	2,480			
1966	4,516	36,710	16,493	61,908	17,730			
1967	6,372	29,226	6,747	4,713	5,955			
1968	4,604	14,594	36,407	91,028	14,537			
1969	5,021	19,211	5,791	11,962	2,318	359	55	1,084
1970	3,199	15,121	18,529	20,523	12,304	418	54	1,222
1971	3,717	18,143	14,876	22,216	4,665	363	57	1,061
1972	9,342	51,725	38,440	17,197	17,442	695	64	2,094
1973	9,254	21,393	5,837	6,585	6,680	584	39	1,519
1974	8,199	2,428	16,021	4,188	2,107	564	31	1,240
1975	1,529	0	0	0	1	172	8	257
1976	1,123	18	6,074	722	124	210	20	372
1977	1,443	48,385	14,424	16,318	4,233	321	23	742
1978	531	56	32,650	1,157	1,001	255	12	565
1979	91	2,158	234	13,478	1,064	37	5	94
1980	631	14,053	2,946	7,224	6,910	161	22	327
1981	283	8,833	1,403	1,466	3,594	110	11	217
1982	1,052	7,136	20,003	16,174	734	250	21	494
1983	47	178	15,369	4,171	675	101	17	260
1984	14	1,290	5,141	4,960	1,892	28	16	88
1985	20	1,060	1,926	5,325	1,892	25	13	45
1986	102	4,185	7,439	4,901	5,928	83	25	216
1987	149	1,620	1,015	3,331	949	45	13	81
1988	206	1,246	12	144	3,109	30	8	60
1989	310	10,083	4,261	27,640	3,375	90	29	223
1990	557	11,574	8,218	13,822	9,382	157	34	359
1991	1,366	17,987	15,629	6,406	5,977	264	49	846
1992	967	52,717	22,127	66,742	15,458	445	51	1,812
1993	1,628	76,874	14,307	39,661	22,504	556	48	2,220
1994	1,996	97,224	44,891	35,405	27,658	721	58	3,011
1995	1,702	76,756	17,834	37,788	54,296	593	50	2,581
1996	1,717	154,150	19,059	37,651	135,623	694	57	3,228
1997	2,566	93,039	2,140	65,745	38,913	582	44	2,537
1998	460	22,031	19,206	39,246	41,057	355	45	1,073
1999	1,049	36,601	28,437	48,552	117,196	630	54	2,209
2000	1,671	15,833	5,651	9,497	40,337	265	35	714
2001	7	610	10,731	11,012	5,397	112	34	377
2002	25	208	21,131	4,578	2,017	100	30	323
2003	312	42,158	38,795	76,113	51,701	364	56	1,454
2004	7,410	103,392	26,617	20,439	37,996	529	53	2,058
2005	26,970	99,465	42,203	106,395	150,121	1,318	78	4,591
2006	30,033	61,298	34,430	56,810	343,827	1,374	64	4,032
2007	17,463	70,580	19,880	39,872	177,573	1,120	56	2,722
2008	14,599	35,679	34,479	18,105	81,876	1,207	58	3,083
2009	2,830	36,680	30,860	27,010	190,800	693	47	2,287
2010	2,359	32,737	42,772	58,610	51,005	541	45	1,557
2011	5,321	51,478	20,720	65,022	142,526	628	41	1,806
60-10	3,827	30,665	16,830	26,513	35,638		38	1,318
01-10	9,425	45,331	27,959	38,949	102,968	693	51	2,109

Appendix B. 3. Annual harvest of Stikine large Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2005–2011.

GSI used for sport and gillnet. Troll is based on CWT.

		D108 Large Stikine Chinook			Total Large
year	Subsistence	Sport	Gillent	Troll	Stikine Chinook
2005	15	3,665	21,233	2,969	27,882
2006	37	3,346	17,259	1,418	22,060
2007	36	2,218	7,057	1,574	10,885
2008	26	1,453	4,905	951	7,335
2009	31	887	244	188	1,350
2010	53	586	238	427	1,303
2011	61	650	970	463	2,145

Appendix B. 4. Chinook salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2011.

Table only includes years when test fisheries were operated.

	Large Chinook			
Year	Total 106	106-41/42	106-30	108
1984	13	13		37
1985	16	16		33
1986	47	23	24	79
1987	25	24	1	30
1988	21	11	10	65
1989	15	11	4	15
1990	13	13		19
1991				21
1992				26
1993				30
1994	0	0		
—				
1998				0
1999				29
2000				21
—				
2009				113

Appendix B. 5. Chinook salmon harvest in the Canadian commercial and recreational fisheries in the Stikine River, 1979–2011.

	LRCF						URCF		Telegraph Aboriginal		Tahltan sport fishery		Total	
			Large		Nonlarge									
Year	Large	Nonlarge	Released	morts	Released	morts	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
1972													0	
1973									200				200	0
1974									100				100	0
1975							178		1,024				1,202	0
1976							236		924				1,160	0
1977							62		100				162	0
1978							100		400				500	0
1979	712	63							850		74	10	1,636	73
1980	1,488						156		587		136	18	2,367	18
1981	664						154		586		213	28	1,617	28
1982	1,693						76		618		181	24	2,568	24
1983	492	430					75		851	215	38	5	1,456	650
1984									643	59	83	11	726	70
1985	256	91					62		793	94	92	12	1,203	197
1986	806	365					104	41	1,026	569	93	12	2,029	987
1987	909	242					109	19	1,183	183	138	18	2,339	462
1988	1,007	201					175	46	1,178	197	204	27	2,564	471
1989	1,537	157					54	17	1,078	115	132	18	2,801	307
1990	1,569	680					48	20	633	259	129	17	2,379	976
1991	641	318					117	32	753	310	129	17	1,640	677
1992	873	89					56	19	911	131	181	24	2,021	263
1993	830	164					44	2	929	142	386	52	2,189	360
1994	1,016	158					76	1	698	191	218	29	2,008	379
1995	1,067	599					9	17	570	244	107	14	1,753	874
1996	1,708	221					41	44	722	156	162	22	2,633	443
1997	3,283	186					45	6	1,155	94	188	25	4,671	311
1998	1,614	328					12	0	538	95	165	22	2,329	445
1999	2,127	789					24	12	765	463	166	22	3,082	1,286
2000	1,970	240					7	2	1,109	386	226	30	3,312	658
2001	826	59					0	0	665	44	190	12	1,681	115
2002	433	209					2	3	927	366	420	46	1,782	624
2003	695	672					19	12	682	373	167	46	1,563	1,103
2004	2,481	2,070					0	1	1,425	497	91	18	3,997	2,586
2005	19,070	1,181					28	1	800	94	118		20,016	1,276
2006	15,098	1,955					22	1	616	122	40		15,776	2,078
2007	10,131	1,469					10	25	364	233	0		10,505	1,727
2008	7,051	908					40	9	769	150	46		7,906	1,067
2009	1,587	498	339	170	153	77	11	26	496	136	20		2,284	737
2010	1,209	698	64	32	56	28	16	48	512	232	50		1,819	1,006
2011	1,737	1,260	58	29	100	50	2	14	515	218	53	23	2,336	1,565
Averages														
85-10	3,069	560					44	16	819	226	148	24	4,088	824
01-10	5,858	972					15	13	726	225	114	31	6,733	1,232

Appendix B. 6. Chinook salmon harvest in inriver test fisheries in the Stikine River, 1985–2011.

	Drift		Set		Additional drift		Commercial license		Tuya		Total	
Year	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
1985											0	0
1986	27	12									27	12
1987	128		61								189	0
1988	168	14	101	15							269	29
1989	116	4	101	20							217	24
1990	167	6	64	12							231	18
1991	90	1	77	15							167	16
1992	135	27	62	21	417	134					614	182
1993	94	11	85	11	389	65					568	87
1994	43	4	74	34	178	40					295	78
1995	18	13	61	35	169	136					248	184
1996	42	5	64	40	192	31					298	76
1997	30	7									30	7
1998	25	11									25	11
1999	53	43	49	16	751	38					853	97
2000	59	4	87	0	787	14					933	18
2001	128	3	56	7	1,652	49					1,836	59
2002	63	50	48	56	1,545	217					1,656	323
2003	64	62	14	91	1,225	617					1,303	770
2004	29	41	22	39	0	0					51	80
2005	14	8	19	13	0	0					33	21
2006	0	0	0	0	0	0					0	0
2007	2	0	3	0	0	0					5	0
2008	7	2	6	8	0	0			13		26	10
2009	3	0	0	0	0	0			29		32	0
2010	2	0	3	1	0	0	1,364	140	8	8	1,377	149
2011	22	28	0	1	0	0	799	219	13	6	834	254
Averages												
85-10	60	14	48	21	406	75					451	90
01-10	31	17	17	22	442	88					632	141

Appendix B. 7. Index counts of Stikine large Chinook salmon escapements, 1979–2011.

Inriver run and escapement generated from mark-recapture studies, inriver and marine harvest as reported in ADF&G fisheries data series reports

Total run from jointly accepted US and Canadian harvest estimates. Terminal run includes only harvest in the Stikine River and District 108.

	Inriver	Inriver		Marine	Terminal	% to	Little Tahltan		Tahltan	Beatty	Andrew	Andrew
Year	Run	harvest	Escapement	harvest	Run	Little Tahltan	Weir	Aerial	Aerial	Aerial	Creek	Comments
1979								1,166	2,118		327	Weir inc. broodstock
1980								2,137	960	122	282	Weir inc. broodstock
1981								3,334	1,852	558	536	Weir inc. broodstock
1982								2,830	1,690	567	672	Weir inc. broodstock
1983								594	453	83	366	Weir inc. broodstock
1984								1,294		126	389	Weir inc. broodstock
1985							3,114	1,598	1,490	147	624	Foot
1986							2,891	1,201	1,400	183	1,381	Foot
1987							4,783	2,706	1,390	312	1,537	Heli
1988							7,292	3,796	4,384	593	1,100	Foot
1989							4,715	2,527		362	1,034	Aerial
1990							4,392	1,755	2,134	271	1,295	Foot
1991							4,506	1,768	2,445	193	780	Aerial
1992							6,627	3,607	1,891	362	1,517	Heli
1993							11,437	4,010	2,249	757	2,067	Foot
1994							6,373	2,422		184	1,115	Heli
1995							3,072	1,117	696	152	669	Foot
1996	31,718	2,931	28,787			0.167	4,821	1,920	772	218	653	Heli
1997	31,509	4,701	26,808			0.207	5,547	1,907	260	218	571	Foot
1998	28,133	2,354	25,779			0.189	4,873	1,385	587	125	950	Foot
1999	23,716	3,935	19,781			0.239	4,733	1,379			1,180	Aerial
2000	30,301	4,245	26,056			0.254	6,631	2,720			1,346	Aerial
2001	66,646	3,517	63,129			0.154	9,730	4,258			2,055	Aerial
2002	53,893	3,438	50,455	3,587	57,480	0.148	7,476	Missed peak time due to weather			1,708	Aerial
2003	49,881	2,866	47,015	3,895	53,776	0.138	6,492	1,903			1,160	Foot
2004	52,538	4,048	48,490	9,599	62,137	0.338	16,381	6,014			2,991	Foot
2005	59,885	20,049	39,836	27,882	87,767	0.182	7,253				1,979	Foot
2006	40,181	15,776	24,405	22,060	62,241	0.158	3,860				2,124	Foot
2007	25,069	10,510	14,559	10,885	35,954	0.039	562				1,736	Aerial
2008	26,284	7,932	18,352	7,335	33,619	0.145	2,663				981	Heli
2009	15,118	2,316	12,803	1,350	16,468	0.175	2,245				628	Aerial
2010	18,312	3,196	15,116	1,303	19,615	0.070	1,057				1,205	Heli
2011	17,652	3,170	14,482	2,145	19,797	0.073	1,058				936	Foot
Averages												
96-10	35,677	6,121	30,758			0.174	5,622				1,155	
01-10	40,781	7,365	33,416	9,766	47,673	0.147	5,772				1,657	

Appendix B. 8. General stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; District 106 & 108, 1982–2011.

Analysis based on SPA

	D106			D106-41/42			D106-30			D108		
Year	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine
1982	0.486	0.319	0.194									
1983	0.668	0.217	0.116									
1984	0.658	0.269	0.074									
1985	0.479	0.419	0.102	0.480	0.401	0.119	0.477	0.453	0.070	0.064	0.000	0.936
1986	0.689	0.293	0.018	0.662	0.308	0.030	0.726	0.272	0.002	0.206	0.017	0.777
1987	0.827	0.155	0.017	0.816	0.166	0.018	0.844	0.140	0.016	0.125	0.000	0.875
1988	0.874	0.106	0.020	0.868	0.112	0.020	0.883	0.095	0.021	0.213	0.039	0.749
1989	0.657	0.311	0.032	0.653	0.303	0.044	0.662	0.322	0.016	0.117	0.054	0.829
1990	0.608	0.371	0.021	0.579	0.395	0.026	0.645	0.340	0.015	0.395	0.128	0.477
1991	0.545	0.331	0.124	0.460	0.377	0.163	0.683	0.257	0.060	0.173	0.118	0.709
1992	0.595	0.232	0.172	0.582	0.241	0.177	0.630	0.211	0.159	0.163	0.051	0.786
1993	0.400	0.338	0.262	0.369	0.327	0.304	0.451	0.357	0.192	0.231	0.114	0.655
1994	0.579	0.254	0.167	0.531	0.271	0.198	0.718	0.207	0.075	0.326	0.208	0.466
1995	0.316	0.560	0.124	0.287	0.565	0.149	0.370	0.551	0.079	0.135	0.204	0.661
1996	0.531	0.268	0.201	0.479	0.245	0.276	0.665	0.326	0.010	0.102	0.082	0.816
1997	0.576	0.271	0.153	0.538	0.269	0.193	0.668	0.276	0.056	0.058	0.131	0.812
1998	0.598	0.307	0.095	0.550	0.337	0.113	0.710	0.237	0.053	0.115	0.108	0.777
1999	0.671	0.092	0.237	0.618	0.101	0.281	0.795	0.072	0.133	0.144	0.036	0.820
2000	0.643	0.233	0.124	0.611	0.223	0.167	0.702	0.252	0.046	0.204	0.128	0.669
2001	0.525	0.332	0.143	0.493	0.336	0.171	0.574	0.327	0.099	0.775	0.098	0.126
2002	0.758	0.098	0.144	0.730	0.101	0.169	0.824	0.091	0.085	0.875	0.120	0.005
2003	0.742	0.096	0.162	0.700	0.095	0.204	0.872	0.100	0.029	0.227	0.118	0.655
2004	0.499	0.222	0.279	0.413	0.227	0.359	0.741	0.206	0.053	0.100	0.030	0.869
2005	0.474	0.317	0.209	0.405	0.338	0.256	0.689	0.250	0.061	0.128	0.178	0.694
2006	0.364	0.362	0.274	0.270	0.332	0.398	0.527	0.415	0.059	0.067	0.130	0.803
2007	0.471	0.120	0.409	0.367	0.126	0.507	0.846	0.098	0.057	0.179	0.133	0.688
2008	0.281	0.164	0.555	0.177	0.151	0.672	0.500	0.190	0.309	0.089	0.110	0.801
2009	0.402	0.215	0.382	0.326	0.214	0.460	0.613	0.219	0.168	0.073	0.110	0.817
2010	0.691	0.185	0.123	0.585	0.207	0.208	0.809	0.161	0.030	0.150	0.083	0.767
2011	0.689	0.101	0.211	0.574	0.118	0.309	0.884	0.073	0.044	0.155	0.042	0.803
Averages												
83-10	0.573	0.257	0.170	0.521	0.260	0.219	0.678	0.247	0.075	0.209	0.097	0.694
01-10	0.521	0.211	0.268	0.447	0.213	0.341	0.699	0.206	0.095	0.266	0.111	0.623
1982	94,276	61,854	37,671									
1983	32,603	10,589	5,650									
1984	60,278	24,624	6,751									
1985	126,914	111,015	27,058	82,563	68,962	20,563	44,351	42,053	6,495	68	0	992
1986	100,337	42,685	2,687	56,462	26,214	2,571	43,875	16,471	116	862	71	3,252
1987	112,893	21,190	2,344	64,582	13,170	1,413	48,311	8,020	931	203	0	1,418
1988	80,868	9,784	1,877	49,776	6,426	1,135	31,092	3,358	742	265	48	933
1989	126,603	59,959	6,172	70,436	32,663	4,787	56,167	27,296	1,385	1,180	545	8,358
1990	112,983	68,921	3,901	60,795	41,415	2,712	52,188	27,506	1,189	4,576	1,479	5,519
1991	78,533	47,707	17,864	41,123	33,644	14,588	37,410	14,063	3,277	3,116	2,117	12,754
1992	120,977	47,207	34,971	85,364	35,277	25,967	35,613	11,930	9,004	8,604	2,696	41,417
1993	82,300	69,617	54,037	47,970	42,450	39,438	34,330	27,167	14,599	17,758	8,742	50,374
1994	122,118	53,683	35,247	83,692	42,620	31,214	38,426	11,063	4,033	31,715	20,250	45,259
1995	65,544	116,075	25,679	38,343	75,505	19,865	27,201	40,570	5,814	10,374	15,641	50,741
1996	165,221	83,271	62,608	107,193	54,823	61,768	58,028	28,448	840	15,755	12,618	125,777
1997	97,101	45,665	25,752	63,827	31,892	22,956	33,274	13,773	2,796	5,381	12,152	75,506
1998	67,890	34,811	10,734	43,479	26,661	8,912	24,411	8,150	1,822	2,541	2,376	17,114
1999	70,334	9,692	24,809	45,302	7,415	20,608	25,036	2,277	4,197	5,263	1,315	30,023
2000	57,935	20,996	11,145	35,327	12,875	9,661	22,608	8,121	1,484	3,226	2,019	10,588
2001	86,078	54,512	23,423	48,906	33,309	17,004	37,172	21,203	6,419	473	60	77
2002	42,573	5,487	8,075	28,487	3,928	6,615	14,086	1,559	1,460	182	25	1
2003	86,720	11,264	18,920	62,037	8,446	18,112	24,683	2,818	808	9,568	4,958	27,632
2004	58,006	25,787	32,467	35,521	19,534	30,874	22,485	6,253	1,593	10,375	3,136	89,882
2005	52,192	34,952	23,048	33,909	28,312	21,426	18,283	6,640	1,622	12,742	17,661	69,062
2006	33,454	33,337	25,189	15,750	19,394	23,215	17,704	13,943	1,975	4,088	7,973	49,237
2007	43,523	11,102	37,855	26,549	9,142	36,720	16,974	1,960	1,136	12,653	9,374	48,554
2008	8,593	4,997	16,943	3,649	3,117	13,886	4,944	1,880	3,057	3,189	3,919	28,571
2009	45,047	24,132	42,805	26,817	17,614	37,795	18,231	6,518	5,009	2,674	4,038	29,968
2010	77,721	20,842	13,887	34,578	12,253	12,274	43,143	8,588	1,613	4,906	2,725	25,106
2011	100,590	14,734	30,765	52,769	10,806	28,380	47,820	3,928	2,385	7,985	2,143	41,351
Averages												
83-10	79,642	40,199	22,054	49,709	27,195	19,465	31,924	13,909	3,208	6,605	5,228	32,620
01-10	53,391	22,641	24,261	31,620	15,505	21,792	21,771	7,136	2,469	6,085	5,387	36,809

Appendix B. 9. Stikine stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1982–2011.

Analysis is based on SPA

	D106			D106-41/42			D106-30			D108		
Year	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1982												
1983	0.103		0.013									
1984	0.029		0.044									
1985	0.091		0.011	0.109		0.010	0.056		0.013	0.292		0.644
1986	0.014		0.004	0.024		0.006	0.000		0.002	0.094		0.683
1987	0.010		0.007	0.015		0.003	0.004		0.012	0.438		0.437
1988	0.020		0.001	0.019		0.001	0.021		0.000	0.178		0.571
1989	0.006		0.026	0.009		0.036	0.062		0.015	0.034		0.795
1990	0.005		0.016	0.008		0.018	0.001		0.013	0.111		0.366
1991	0.100		0.024	0.129		0.034	0.052		0.008	0.395		0.314
1992	0.070		0.102	0.088		0.089	0.022		0.138	0.258		0.528
1993	0.098		0.164	0.134		0.169	0.036		0.156	0.256		0.399
1994	0.142		0.025	0.166		0.032	0.069		0.006	0.362		0.103
1995	0.081	0.001	0.043	0.099	0.001	0.048	0.047	0.000	0.032	0.455	0.006	0.200
1996	0.166	0.028	0.007	0.228	0.039	0.009	0.008	0.001	0.001	0.622	0.069	0.125
1997	0.058	0.079	0.016	0.079	0.101	0.014	0.009	0.026	0.021	0.362	0.261	0.189
1998	0.015	0.080	0.000	0.017	0.096	0.000	0.010	0.043	0.000	0.189	0.244	0.343
1999	0.057	0.061	0.118	0.074	0.079	0.128	0.018	0.020	0.095	0.414	0.201	0.205
2000	0.020	0.085	0.019	0.028	0.116	0.023	0.007	0.027	0.012	0.132	0.261	0.275
2001	0.039	0.079	0.025	0.032	0.112	0.028	0.049	0.029	0.021	0.000	0.005	0.121
2002	0.037	0.072	0.035	0.049	0.087	0.034	0.009	0.039	0.037	0.000	0.000	0.005
2003	0.075	0.053	0.035	0.097	0.068	0.040	0.005	0.005	0.019	0.179	0.062	0.414
2004	0.241	0.020	0.018	0.315	0.026	0.018	0.031	0.005	0.017	0.613	0.018	0.239
2005	0.182	0.000	0.027	0.227	0.000	0.029	0.041	0.000	0.020	0.437	0.000	0.257
2006	0.203	0.056	0.016	0.304	0.078	0.016	0.027	0.017	0.015	0.588	0.081	0.135
2007	0.322	0.082	0.005	0.403	0.099	0.005	0.028	0.021	0.007	0.474	0.147	0.067
2008	0.165	0.238	0.152	0.168	0.336	0.169	0.158	0.033	0.118	0.352	0.291	0.159
2009	0.215	0.090	0.077	0.287	0.104	0.068	0.016	0.050	0.103	0.360	0.225	0.232
2010	0.047	0.051	0.026	0.084	0.088	0.036	0.005	0.011	0.015	0.356	0.178	0.234
2011	0.094	0.066	0.050	0.146	0.098	0.065	0.005	0.013	0.025	0.445	0.142	0.216
Averages												
83-10	0.093	0.067	0.038	0.123	0.089	0.041	0.028	0.020	0.034	0.306	0.128	0.309
01-10	0.152	0.074	0.042	0.197	0.100	0.044	0.037	0.021	0.037	0.336	0.101	0.186
1982												
1983	5,020		631									
1984	2,673		4,078									
1985	24,045		3,013	18,801		1,762	5,244		1,251	310		683
1986	2,081		606	2,070		501	11		105	393		2,858
1987	1,376		968	1,155		258	221		710	710		708
1988	1,813		64	1,071		64	742		0	222		711
1989	1,111		5,061	957		3,830	154		1,231	341		8,017
1990	915		2,986	801		1,911	114		1,075	1,280		4,239
1991	14,364		3,501	11,541		3,048	2,823		453	7,112		5,642
1992	14,187		20,784	12,961		13,005	1,226		7,778	13,599		27,818
1993	20,204		33,833	17,446		21,992	2,758		11,841	19,688		30,686
1994	29,876		5,371	26,164		5,050	3,712		321	35,222		10,037
1995	16,715	125	8,839	13,292	125	6,448	3,423	0	2,391	34,950	461	15,330
1996	51,598	8,821	2,189	50,924	8,731	2,113	674	90	76	95,837	10,621	19,319
1997	9,764	13,232	2,756	9,327	11,937	1,692	437	1,295	1,064	33,644	24,288	17,574
1998	1,678	9,020	36	1,326	7,555	31	352	1,465	5	4,170	5,383	7,561
1999	5,986	6,424	12,399	5,421	5,782	9,405	563	641	2,993	15,156	7,371	7,497
2000	1,827	7,612	1,706	1,617	6,727	1,317	210	885	389	2,097	4,138	4,353
2001	6,339	12,965	4,119	3,164	11,063	2,777	3,175	1,902	1,342	0	3	74
2002	2,055	4,058	1,962	1,896	3,394	1,325	159	664	637	0	0	1
2003	8,736	6,145	4,039	8,595	6,016	3,501	141	129	538	7,562	2,615	17,455
2004	28,027	2,382	2,058	27,098	2,244	1,532	929	138	526	63,347	1,869	24,666
2005	20,080	0	2,968	18,979	0	2,447	1,101	0	521	43,467	0	25,595
2006	18,640	5,122	1,427	17,729	4,553	933	911	569	494	36,021	4,944	8,272
2007	29,759	7,612	484	29,196	7,182	342	563	430	142	33,439	10,398	4,716
2008	5,031	7,261	4,651	3,467	6,936	3,483	1,564	325	1,168	12,547	10,365	5,659
2009	24,085	10,080	8,640	23,623	8,589	5,583	462	1,491	3,057	13,188	8,271	8,508
2010	5,231	5,775	2,882	4,959	5,210	2,105	272	565	776	11,645	5,811	7,651
2011	13,750	9,693	7,323	13,454	8,972	5,954	296	721	1,368	22,916	7,307	11,127
Averages												
83-10	12,615	6,665	5,073	12,061	6,003	3,710	1,229	662	1,572	18,690	6,034	10,217
01-10	14,798	6,140	3,323	13,871	5,519	2,403	928	621	920	22,122	4,428	10,260

Appendix B. 10. Tahltan sockeye salmon stock proportions and harvest of in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1994–2011.

Analysis is based on SPA

	D106			D106-41/42			D106-30			D108		
Year	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.142	0.033	0.108	0.166	0.040	0.127	0.069	0.015	0.055	0.362	0.116	0.246
1995	0.081	0.036	0.044	0.099	0.051	0.049	0.047	0.010	0.036	0.455	0.257	0.198
1996	0.166	0.019	0.147	0.228	0.025	0.203	0.008	0.002	0.006	0.622	0.070	0.552
1997	0.058	0.021	0.037	0.079	0.023	0.056	0.009	0.015	-0.006	0.362	0.102	0.260
1998	0.015	0.002	0.013	0.017	0.003	0.014	0.010	0.000	0.010	0.189	0.008	0.182
1999	0.057	0.003	0.054	0.074	0.004	0.070	0.018	0.001	0.017	0.414	0.024	0.390
2000	0.020	0.003	0.017	0.028	0.004	0.024	0.007	0.000	0.007	0.132	0.032	0.100
2001	0.039	0.010	0.029	0.032	0.015	0.017	0.049	0.002	0.047	0.000	0.000	0.000
2002	0.037	0.012	0.024	0.049	0.017	0.031	0.009	0.000	0.009	0.000	0.000	0.000
2003	0.075	0.036	0.039	0.097	0.047	0.050	0.005	0.001	0.004	0.179	0.087	0.092
2004	0.241	0.097	0.144	0.315	0.125	0.191	0.031	0.020	0.011	0.613	0.252	0.361
2005	0.182	0.094	0.088	0.227	0.123	0.104	0.041	0.002	0.039	0.437	0.258	0.179
2006	0.203	0.113	0.090	0.304	0.174	0.130	0.027	0.007	0.020	0.588	0.331	0.257
2007	0.322	0.200	0.122	0.403	0.251	0.152	0.028	0.015	0.013	0.474	0.324	0.150
2008	0.165	0.073	0.091	0.168	0.106	0.062	0.158	0.004	0.154	0.352	0.165	0.186
2009	0.215	0.063	0.152	0.287	0.084	0.203	0.016	0.004	0.012	0.360	0.097	0.262
2010	0.047	0.019	0.027	0.084	0.034	0.049	0.005	0.002	0.003	0.356	0.143	0.213
2011	0.094	0.051	0.043	0.146	0.079	0.067	0.005	0.003	0.003	0.445	0.191	0.254
Averages												
94-10	0.121	0.049	0.072	0.156	0.066	0.090	0.032	0.006	0.026	0.347	0.133	0.213
01-10	0.152	0.072	0.081	0.197	0.098	0.099	0.037	0.006	0.031	0.336	0.166	0.170
1994	29,876	7,019	22,857	26,164	6,230	19,934	3,712	789	2,923	35,222	11,286	23,936
1995	16,715	7,533	9,182	13,292	6,778	6,514	3,423	755	2,668	34,950	19,726	15,224
1996	51,598	5,772	45,826	50,924	5,584	45,340	674	188	486	95,837	10,796	85,041
1997	9,764	3,483	6,281	9,327	2,733	6,594	437	750	-313	33,644	9,500	24,144
1998	1,678	201	1,477	1,326	201	1,125	352	0	352	4,170	170	4,000
1999	5,986	288	5,698	5,421	266	5,155	563	22	541	15,156	877	14,279
2000	1,827	254	1,573	1,617	254	1,363	210	0	210	2,097	506	1,591
2001	6,339	1,592	4,747	3,164	1,441	1,723	3,175	151	3,024	0	0	0
2002	2,055	680	1,375	1,896	680	1,216	159	0	159	0	0	0
2003	8,736	4,186	4,550	8,595	4,161	4,434	141	25	116	7,562	3,666	3,896
2004	28,027	11,306	16,721	27,098	10,713	16,385	929	593	336	63,347	26,073	37,274
2005	20,080	10,356	9,724	18,979	10,292	8,687	1,101	64	1,037	43,467	25,614	17,853
2006	18,640	10,363	8,277	17,729	10,126	7,603	911	237	674	36,021	20,259	15,762
2007	29,759	18,506	11,253	29,196	18,198	10,998	563	308	255	33,439	22,867	10,572
2008	5,031	2,240	2,791	3,467	2,196	1,271	1,564	44	1,520	12,547	5,899	6,648
2009	24,085	7,053	17,032	23,623	6,938	16,685	462	115	267	13,188	3,560	9,628
2010	5,231	2,140	3,091	4,959	2,035	2,924	272	105	121	11,645	4,665	6,980
2011	13,750	7,449	6,301	13,454	7,300	6,155	296	150	146	22,916	9,834	13,083
Averages												
94-10	15,613	5,469	10,144	14,516	5,225	9,291	1,097	244	846	26,017	9,733	16,284
01-10	14,798	6,842	7,956	13,871	6,678	7,193	928	164	751	22,122	11,260	10,861

Appendix B. 11. Stikine River sockeye salmon harvest in the U.S. Subsistence fishery, 2004–2011.

Stocks were proportioned based on using inriver stock comps

	Stikine								
Year	All Tahltan	Tuya	Mainstem	Total	All Tahltan	Tuya	Mainstem	TahltanEnhance	WildTahltan
2004	0.664	0.026	0.311	243	161	6	75	65	96
2005	0.662	0.020	0.318	252	167	5	80	77	90
2006	0.672	0.144	0.185	390	262	56	72	146	116
2007	0.541	0.165	0.294	244	132	40	72	67	65
2008	0.385	0.326	0.289	428	165	139	124	80	85
2009	0.541	0.244	0.215	723	301	176	156	101	290
2010	0.417	0.289	0.294	1,653	689	479	485	184	505
2011	0.467	0.205	0.328	1,741	814	356	571	309	505

Appendix B. 12. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984–2011.

Table only includes years when test fisheries were operated and data based on SPA

			Stikine					
Year	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan
Sub-district 106-41 (Sumner Strait) Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.834	0.149	0.008		0.009	0.017		
1987	0.816	0.166	0.015		0.003	0.018		
1988	0.868	0.098	0.034		0.000	0.034		
1989	0.624	0.304	0.017		0.056	0.072		
1990	0.548	0.416	0.014		0.022	0.035		
—								
1994	0.500	0.250	0.250		0.000	0.250	0.083	0.167
Sub-district 106-41 (Sumner Strait) harvest								
1984	901	368	40		61	101		
1985	2,085	1,741	475		44	519		
1986	819	146	8		9	17		
1987	2,169	442	39		9	47		
1988	886	100	35		0	35		
1989	1,274	621	34		114	148		
1990	1,237	939	31		49	80		
—								
1994	6	3	3		0	3		
Sub-district 106-30 (Clarence Strait) Proportions								
1986	0.726	0.272	0.000		0.002	0.002		
1987	0.844	0.140	0.004		0.012	0.016		
1988	0.746	0.254	0.000		0.000	0.000		
1989	0.514	0.486	0.000		0.000	0.000		
Subdistrict 106-30 (Clarence Strait) harvest								
1986	263	99	0		1	1		
1987	758	126	3		11	15		
1988	12	4	0		0	0		
1989	19	18	0		0	0		
District 106 Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.805	0.182	0.006		0.007	0.013		
1987	0.823	0.160	0.012		0.006	0.017		
1988	0.867	0.100	0.033		0.000	0.033		
1989	0.622	0.307	0.016		0.055	0.071		
1990	0.548	0.416	0.014		0.022	0.035		
—								
1994	0.500	0.250	0.250		0.000	0.250	0.000	0.250
District 106 harvest								
1984	901	368	40		61	101		
1985	2,085	1,741	475		44	519		
1986	1,082	245	8		9	17		
1987	2,928	568	42		20	62		
1988	898	104	35		0	35		
1989	1,293	639	34		114	148		
1990	1,237	939	31		49	80		
—								
1994	6	3	3		0	3	0	3
District 108 Proportions								
1985	0.064	0.000	0.292		0.644	0.936		
1986	0.134	0.044	0.486		0.336	0.822		
1987	0.125	0.000	0.438		0.437	0.875		
1988	0.205	0.049	0.132		0.614	0.746		
1989	0.132	0.084	0.072		0.712	0.784		
1990	0.417	0.172	0.094		0.318	0.411		
1991	0.128	0.128	0.494		0.251	0.745		
1992	0.149	0.076	0.333		0.442	0.774		
1993	0.168	0.109	0.475		0.248	0.719		
—								
1998	0.064	0.041	0.353	0.438	0.104	0.895	0.016	0.336
1999	0.162	0.019	0.481	0.298	0.041	0.820	0.028	0.453
2000	0.110	0.116	0.302	0.321	0.150	0.774	0.062	0.240
District 108 harvest								
1985	81	0	367		810	1,177		
1986	76	25	274		190	464		
1987	36	0	127		127	254		
1988	93	22	59		277	336		
1989	137	87	75		739	814		
1990	361	149	81		275	356		
1991	114	114	441		224	665		
1992	194	99	432		574	1,006		
1993	51	33	144		75	219		
—								
1998	224	145	1,238	1,538	365	3,141	57	1,181
1999	776	89	2,309	1,430	197	3,936	135	2,174
2000	516	544	1,416	1,505	705	3,626	291	1,125

Appendix B. 13. All harvest in of sockeye salmon in Canadian commercial and assessment fisheries, 1972–2011.

All Tuya Area fish considered to be Tuya fish

	Commercial/FN				Test					Tahltan Area		Tuya Area	
Year	LRCF	URCF	Telegraph Aboriginal	Total Canadian treaty harvest	Drift Net	Set Net	Additional Drifts	Tuya Assesment	Test total	ESSR	Oto samples	ESSR	Oto samples
1972			4,373	4,373									
1973			3,670	3,670									
1974			3,500	3,500									
1975		270	1,982	2,252									
1976		733	2,911	3,644									
1977		1,975	4,335	6,310									
1978		1,500	3,500	5,000									
1979[a]	10,534		3,000	13,534									
1980	18,119	700	2,100	20,919									
1981	21,551	769	4,697	27,017									
1982	15,397	195	4,948	20,540									
1983	15,857	614	4,649	21,120									
1984			5,327	5,327									
1985	17,093	1,084	7,287	25,464		1,340			1,340				
1986	12,411	815	4,208	17,434	412				412				
1987	6,138	498	2,979	9,615	385	1,283			1,668				
1988	12,766	348	2,177	15,291	325	922			1,247				
1989	17,179	493	2,360	20,032	364	1,243			1,607				
1990	14,530	472	3,022	18,024	447	1,493			1,940				
1991	17,563	761	4,439	22,763	503	1,872			2,375				
1992	21,031	822	4,431	26,284	393	1,971	594		2,958				
1993	38,464	1,692	7,041	47,197	440	1,384	1,925		3,749	1,752		0	
1994	38,462	2,466	4,167	45,095	179	414	840		1,433	6,852		0	
1995	45,622	2,355	5,490	53,467	297	850	1,423		2,570	10,740		0	
1996	66,262	1,101	6,918	74,281	262	338	712		1,312	14,339		216	
1997	56,995	2,199	6,365	65,559	245				245		378	2,015	
1998	37,310	907	5,586	43,803	190				190		390	6,103	
1999	32,556	625	4,874	38,055	410	803	4,683		5,896		429	2,822	
2000	20,472	889	6,107	27,468	374	1,015	989		2,378		406	1,283	
2001	19,872	487	5,241	25,600	967	2,223	91		3,281		50	0	410
2002	10,420	484	6,390	17,294	744	3,540	128		4,412		400	0	501
2003	51,735	454	6,595	58,784	997	2,173	186		3,356		400	7,031	
2004	77,530	626	6,862	85,018	420	918	0		1,338		420	1,675	
2005	79,952	605	5,333	85,890	339	1,312	0		1,651		400	0	148
2006	95,791	520	5,094	101,405	299	629	0		928		400	0	0
2007	56,913	912	2,188	60,013	435	673	0		1,108		200	0	151
2008	28,636	505	4,510	33,651	241	870	0	1,955	3,066		100		280
2009	39,409	2,476	5,148	47,033	250	1,092	0	2,144	3,486		349		214
2010	42,049	1,215	7,276	50,540	304	1,450	3	2,792	4,549		158		224
2011	47,575	972	6,893	55,440	590	2,525	21	2,878	6,014		340		153
Averages													
85-10	36,814	993	5,080	42,887	409	1,296			2,250				
01-10	50,231	828	5,464	56,523	500	1,488	41	2,297	2,718		288		241

[a] The lower river commercial Harvest in 1979 includes the upper river commercial harvest

Appendix B. 14. Sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2011.

Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and GPA 1986;
SPA in 1987 and 1988; and egg diameter and otolith thermal marks in 1989-2011. stock comp comes from sampling at this terminal fishing site

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1972							0.900	0.000	0.100						
1973							0.900	0.000	0.100						
1974							0.900	0.000	0.100						
1975				0.900	0.000	0.100	0.900	0.000	0.100						
1976				0.900	0.000	0.100	0.900	0.000	0.100						
1977				0.900	0.000	0.100	0.900	0.000	0.100						
1978				0.900	0.000	0.100	0.900	0.000	0.100						
1979	0.433		0.567				0.900	0.000	0.100						
1980	0.309		0.691	0.900	0.000	0.100	0.900	0.000	0.100						
1981	0.476		0.524	0.900	0.000	0.100	0.900	0.000	0.100						
1982	0.624		0.376	0.900	0.000	0.100	0.900	0.000	0.100						
1983	0.422		0.578	0.900	0.000	0.100	0.900	0.000	0.100						
1984							0.900	0.000	0.100						
1985	0.623		0.377	0.900	0.000	0.100	0.900	0.000	0.100	0.372		0.628			
1986	0.489		0.511	0.900	0.000	0.100	0.900	0.000	0.100	0.352		0.648			
1987	0.225		0.775	0.900	0.000	0.100	0.900	0.000	0.100	0.273		0.727			
1988	0.161		0.839	0.900	0.000	0.100	0.900	0.000	0.100	0.282		0.718			
1989	0.164		0.836	0.900	0.000	0.100	0.900	0.000	0.100	0.258		0.742			
1990	0.346		0.654	0.900	0.000	0.100	0.900	0.000	0.100	0.454		0.546			
1991	0.634		0.366	0.900	0.000	0.100	0.900	0.000	0.100	0.608		0.392			
1992	0.482		0.518	0.900	0.000	0.100	0.900	0.000	0.100	0.646		0.354			
1993	0.537		0.463	0.900	0.000	0.100	0.900	0.000	0.100	0.583		0.417			
1994	0.616		0.384	0.900	0.000	0.100	0.900	0.000	0.100	0.857		0.143			
1995	0.676	0.020	0.304	0.900	0.025	0.075	0.900	0.025	0.075	0.803	0.008	0.189			
1996	0.537	0.113	0.350	0.858	0.136	0.005	0.839	0.141	0.021	0.667	0.088	0.245			
1997	0.356	0.272	0.372	0.524	0.379	0.097	0.521	0.378	0.101	0.396	0.220	0.384			
1998	0.335	0.352	0.313	0.400	0.570	0.030	0.421	0.555	0.023	0.368	0.268	0.363			
1999	0.576	0.241	0.183	0.574	0.330	0.096	0.623	0.292	0.085	0.514	0.265	0.221			
2000	0.252	0.397	0.350	0.252	0.654	0.094	0.284	0.653	0.063	0.254	0.413	0.333			
2001	0.175	0.226	0.599	0.437	0.470	0.092	0.342	0.561	0.097	0.208	0.282	0.510			
2002	0.320	0.128	0.552	0.376	0.496	0.128	0.422	0.494	0.084	0.391	0.157	0.451			
2003	0.427	0.161	0.412	0.696	0.220	0.084	0.605	0.238	0.157	0.448	0.128	0.424			
2004	0.707	0.016	0.276	0.861	0.067	0.072	0.909	0.089	0.002	0.512	0.033	0.455			
2005	0.761	0.018	0.221	0.962	0.021	0.017	0.956	0.013	0.031	0.542	0.005	0.453			
2006	0.747	0.178	0.075	0.852	0.133	0.015	0.780	0.131	0.089	0.355	0.014	0.631			
2007	0.635	0.191	0.173	0.658	0.043	0.299	0.643	0.042	0.316	0.262	0.076	0.662			
2008	0.470	0.389	0.141	0.719	0.186	0.095	0.729	0.183	0.088	0.385	0.266	0.348	0.278	0.489	0.233
2009	0.601	0.250	0.149	0.668	0.303	0.029	0.686	0.281	0.033	0.323	0.187	0.490	0.220	0.714	0.067
2010	0.456	0.356	0.188	0.565	0.428	0.007	0.570	0.413	0.017	0.258	0.108	0.634	0.427	0.512	0.061
2011	0.495	0.212	0.293	0.678	0.288	0.034	0.670	0.284	0.046	0.268	0.154	0.578	0.343	0.568	0.089
Averages															
79-10	0.470		0.423	0.763	0.149	0.088	0.770	0.140	0.090						
01-10	0.530	0.191	0.279	0.679	0.237	0.084	0.664	0.244	0.091	0.369	0.126	0.506			

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Appendix B. 14. Continued.

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1972							3,936		437						
1973							3,303		367						
1974							3,150		350						
1975				243		27	1,784		198						
1976				660		73	2,620		291						
1977				1,778		198	3,902		434						
1978				1,350		150	3,150		350						
1979	4,561		5,973				2,700		300						
1980	5,599		12,520	630		70	1,890		210						
1981	10,258		11,293	692		77	4,227		470						
1982	9,608		5,789	176		20	4,453		495						
1983	6,692		9,165	553		61	4,184		465						
1984							4,794		533						
1985	10,649		6,444	976		108	6,558		729	499		841			
1986	6,069		6,342	734		82	3,787		421	145		267			
1987	1,380		4,758	448		50	2,681		298	455		1,213			
1988	2,062		10,704	313		35	1,959		218	352		895			
1989	2,813		14,366	444		49	2,124		236	415		1,192			
1990	5,029		9,501	425		47	2,720		302	881		1,059			
1991	11,136		6,427	685		76	3,995		444	1,443		932			
1992	10,134		10,897	740		82	3,988		443	1,912		1,046			
1993	20,662		17,802	1,523		169	6,337		704	2,184		1,565			
1994	23,678		14,784	2,219		247	3,750		417	1,228		205			
1995	30,848	893	13,881	2,120	60	176	4,941	139	410	2,064	20	486			
1996	35,584	7,465	23,213	945	150	6	5,802	972	144	875	116	321			
1997	20,269	15,513	21,213	1,152	834	213	3,318	2,403	644	97	54	94			
1998	12,498	13,137	11,675	363	517	27	2,352	3,103	131	70	51	69			
1999	18,742	7,862	5,952	359	206	60	3,038	1,423	413	3,031	1,564	1,301			
2000	5,165	8,136	7,171	224	581	84	1,733	3,989	385	605	982	791			
2001	3,482	4,483	11,907	213	229	45	1,795	2,939	507	684	924	1,673			
2002	3,335	1,335	5,750	182	240	62	2,697	3,155	538	1,726	694	1,992			
2003	22,067	8,335	21,333	316	100	38	3,987	1,571	1,037	1,505	428	1,423			
2004	54,841	1,276	21,415	539	42	45	6,240	608	14	686	44	608			
2005	60,881	1,437	17,634	582	13	10	5,099	71	163	895	8	748			
2006	71,573	17,079	7,139	443	69	8	3,974	668	452	329	13	586			
2007	36,167	10,891	9,855	600	39	273	1,406	91	691	290	84	734			
2008	13,455	11,153	4,028	363	94	48	3,287	825	398	428	296	387	543	956	455
2009	23,666	9,852	5,891	1,654	749	73	3,530	1,449	169	434	251	657	471	1,530	144
2010	19,185	14,965	7,899	687	520	9	4,145	3,004	127	453	190	1,114	1,192	1,429	171
2011	23,530	10,106	13,939	659	280	33	4,620	1,957	316	841	482	1,813	988	1,634	257
Averages															
79-10	18,132		11,056	710		78	3,672		403						
01-10	30,865	8,081	11,285	558	209	61	3,616	1,438	410	743	293	992			

Appendix B. 15. Tahltan sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2011.

Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and GPA 1986; stock comp comes from direct sampling of respective fisheries

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.616	0.000	0.616	0.900	0.128	0.772	0.900	0.128	0.772	0.857	0.000	0.857			
1995	0.676	0.195	0.481	0.900	0.260	0.640	0.900	0.260	0.640	0.803	0.284	0.519			
1996	0.537	0.066	0.471	0.858	0.110	0.748	0.839	0.126	0.713	0.667	0.082	0.585			
1997	0.356	0.072	0.284	0.524	0.108	0.416	0.521	0.108	0.413	0.396	0.082	0.314			
1998	0.335	0.020	0.315	0.400	0.030	0.370	0.421	0.022	0.399	0.368	0.021	0.347			
1999	0.576	0.021	0.554	0.574	0.005	0.570	0.623	0.028	0.596	0.514	0.019	0.495			
2000	0.252	0.039	0.213	0.252	0.000	0.252	0.284	0.009	0.275	0.254	0.040	0.215			
2001	0.175	0.032	0.143	0.437	0.133	0.304	0.342	0.065	0.277	0.208	0.038	0.171			
2002	0.320	0.074	0.246	0.376	0.087	0.289	0.422	0.095	0.327	0.391	0.091	0.300			
2003	0.427	0.131	0.296	0.696	0.214	0.482	0.605	0.201	0.403	0.448	0.111	0.337			
2004	0.707	0.285	0.422	0.861	0.380	0.481	0.909	0.371	0.538	0.512	0.207	0.305			
2005	0.761	0.352	0.409	0.962	0.240	0.722	0.956	0.235	0.721	0.542	0.198	0.344			
2006	0.747	0.416	0.331	0.852	0.421	0.431	0.780	0.382	0.398	0.355	0.197	0.158			
2007	0.635	0.321	0.315	0.658	0.235	0.423	0.643	0.237	0.406	0.262	0.105	0.157			
2008	0.470	0.228	0.242	0.719	0.121	0.598	0.729	0.121	0.608	0.385	0.183	0.203	0.278	0.122	0.156
2009	0.601	0.155	0.445	0.668	0.158	0.511	0.686	0.143	0.542	0.323	0.093	0.230	0.220	0.038	0.182
2010	0.456	0.122	0.334	0.565	0.221	0.345	0.570	0.227	0.342	0.258	0.060	0.198	0.427	0.190	0.237
2011	0.495	0.188	0.307	0.678	0.240	0.438	0.670	0.223	0.447	0.268	0.115	0.153	0.343	0.127	0.216
Averages															
01-10	0.530	0.212	0.318	0.679	0.221	0.459	0.664	0.208	0.456	0.369	0.128	0.240			
1994	23,678			2,219	315	1,904	3,750	533	3,217	1,228					
1995	30,848	8,912	21,936	2,120	612	1,508	4,941	1,427	3,514	2,064	729	1,335			
1996	35,584	4,387	31,197	945	121	824	5,802	871	4,931	875	108	767			
1997	20,269	4,094	16,175	1,152	238	914	3,318	687	2,631	97	20	77			
1998	12,498	747	11,751	363	27	336	2,352	125	2,227	70	4	66			
1999	18,742	696	18,046	359	3	356	3,038	135	2,903	3,031	113	2,918			
2000	5,165	801	4,364	224	0	224	1,733	52	1,681	605	94	511			
2001	3,482	632	2,850	213	65	148	1,795	341	1,454	684	124	560			
2002	3,335	776	2,559	182	42	140	2,697	605	2,092	1,726	402	1,324			
2003	22,067	6,763	15,304	316	97	219	3,987	1,328	2,659	1,505	374	1,131			
2004	54,841	22,124	32,717	539	238	301	6,240	2,549	3,691	686	277	409			
2005	60,881	28,174	32,707	582	145	437	5,099	1,254	3,845	895	327	568			
2006	71,573	39,888	31,685	443	219	224	3,974	1,946	2,028	329	183	146			
2007	36,167	18,266	17,901	600	214	386	1,406	518	888	290	116	174			
2008	13,455	6,533	6,922	363	61	302	3,287	547	2,740	428	203	225	543	239	304
2009	23,666	6,124	17,542	1,654	390	1,264	3,530	738	2,791	434	125	309	471	81	390
2010	19,185	5,126	14,059	687	268	419	4,145	1,654	2,490	453	105	348	1,192	530	662
2011	23,530	8,924	14,606	659	234	425	4,620	1,540	3,080	841	361	480	988	365	622
Averages															
01-10	30,865	13,441	17,425	558	174	384	3,616	1,148	2,468	743	224	519			

Appendix B. 16. Tahltan Lake weir data with enhanced and wild Tahltan fish, 1979–2011.

	Weir count			Actual escapement			Broodstock taken			Sockeye otolith samples			Total spawners		
Year	Total Count	TahltanEnhance	WildTahltan	TotalEscapement	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan
1979	10,211			10,211											
1980	11,018			11,018											
1981	50,790			50,790											
1982	28,257			28,257											
1983	21,256			21,256											
1984	32,777			32,777											
1985	67,326			67,326											
1986	20,280			20,280											
1987	6,958			6,958											
1988	2,536			2,536											
1989	8,316			8,316			2,210								
1990	14,927			14,927			3,302								
1991	50,135			50,135			3,552								
1992	59,907			59,907			3,694								
1993	53,362	1,167	52,195	51,610	1,129	50,481	4,506	99	4,407				47,104	1,030	46,074
1994	46,363	7,919	38,444	39,511	6,749	32,762	3,378	577	2,801				36,133	6,172	29,961
1995	42,317	15,997	26,320	31,577	11,937	19,640	4,902	1,853	3,049				26,675	10,084	16,591
1996	52,500	6,121	46,379	38,161	4,449	33,712	4,402	513	3,889				33,759	3,936	29,823
1997	12,483	2,445	9,660	12,105	2,445	9,660	2,294	463	1,831	378	76	302	9,811	1,982	7,829
1998	12,658	691	11,577	12,268	691	11,577	3,099	75	3,024	390	26	364	9,169	616	8,553
1999	10,748	719	10,029	10,319	690	9,629	2,870	193	2,677	429	29	400	7,449	497	6,952
2000	6,076	1,230	4,846	5,670	1,148	4,522	1,717	347	1,370	406	82	324	3,953	801	3,152
2001	14,811	5,865	8,946	14,761	5,845	8,916	2,386	945	1,441	50	20	30	12,375	4,900	7,475
2002	17,740	5,212	9,408	14,220	5,097	9,123	3,051	1,298	1,753	400	115	285	11,169	3,799	7,370
2003	53,933	23,595	30,338	53,533	23,420	30,113	3,946	1,726	2,220	400	175	225	49,587	21,694	27,893
2004	63,372	31,439	31,933	62,952	31,244	31,708	4,243	1,250	2,993	420	195	225	58,709	29,994	28,715
2005	43,446	17,928	25,518	43,046	17,770	25,276	3,424	1,350	2,074	400	158	242	39,622	16,420	23,202
2006	53,855	25,966	27,889	53,455	25,772	27,683	3,403	1,646	1,757	400	194	206	50,052	24,126	25,926
2007	21,074	8,966	12,108	20,874	8,881	11,993	2,839	1,208	1,631	200	85	115	18,035	7,673	10,362
2008	10,516	5,344	5,172	10,416	5,295	5,121	2,364	1,152	1,212	100	49	51	8,052	4,143	3,909
2009	30,673	5,030	25,643	30,324	4,971	25,353	3,011	930	2,081	349	59	290	27,313	4,041	23,272
2010	22,860	9,670	13,190	22,702	9,596	13,106	4,484	1,807	2,677	158	74	84	18,218	7,789	10,429
2011	34,588	12,123	22,465	34,248	12,017	22,231	4,559	1,769	2,790	340	106	234	29,689	10,248	19,441
Averages															
03-10	33,228	13,902	19,015	32,628	13,789	18,839	3,315	1,331	1,984	288	112	175	29,313	12,458	16,855

Appendix B. 17. Sockeye salmon harvest by stock in the Stikine River under Canadian ESSR licenses, 1992–2011.

	Tahltan Area ESSR License			Tuya Area ESSR		
Year	All Tahltan	TahltanEnhance	WildTahltan	Tuya	Total	otolith samples
1993	1,752	38	1,714		0	
1994	6,852	1,170	5,682		0	
1995	10,740	4,060	6,680		0	
1996	14,339	1,672	12,667	216	216	
1997				2,015	2,015	
1998				6,103	6,103	
1999				2,822	2,822	
2000				1,283	1,283	
2001					0	410
2002	3,120	1,061	2,059		0	501
2003				7,031	7,031	
2004				1,675	1,675	
2005					0	148
2006					0	0
2007					0	151
2008						280
2009						214
2010						224
2011						153

Appendix B. 18. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon, 1979–2011.

In 1979-1988, there were US estimates and 1983-1988, they overlapped with estimates from Canada and the All tahltan estimate was oftened averaged. The estimates are from the LRCC, test, or average of LRCC and Test.

Year	All Tahltan	Tuya	Mainstem	Type
1979	0.433		0.567	
1980	0.305		0.695	
1981	0.475		0.525	
1982	0.618		0.382	
1983	0.456		0.544	
1984	0.493		0.507	
1985	0.466		0.534	
1986	0.449		0.551	
1987	0.304		0.696	
1988	0.172		0.828	
1989	0.188		0.812	
1990	0.417		0.583	
1991	0.561		0.439	
1992	0.496		0.504	
1993	0.477		0.523	
1994	0.606		0.394	LRCF
1995	0.578	0.016	0.406	LRCF
1996	0.519	0.104	0.377	LRCF
1997	0.297	0.229	0.474	LRCF
1998	0.309	0.348	0.344	LRCF
1999	0.545	0.245	0.209	LRCF
2000	0.260	0.391	0.349	LRCF
2001	0.202	0.268	0.530	test
2002	0.360	0.141	0.498	test
2003	0.421	0.158	0.421	test
2004	0.664	0.026	0.311	LRCF
2005	0.662	0.020	0.318	LRCF
2006	0.672	0.144	0.185	LRCF
2007	0.541	0.165	0.294	LRCF
2008	0.385	0.326	0.289	average
2009	0.541	0.244	0.215	average
2010	0.417	0.289	0.294	average
2011	0.467	0.205	0.328	LRCF
Averages				
79-10	0.446		0.456	
01-10	0.486	0.178	0.336	

Appendix B. 19. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984–2011.

The index represents the combined counts from eight spawning areas.

Year	Chutine River	Scud River	Porcupine Slough	Christina Creek	Craig River	Bronson Slough	Verrett Creek	Verrett Slough	Escapement Index
1984	526	769	69	130	102		640		2,236
1985	253	282	69	67	27		383		1,081
1986	139	151	6	0	0		270		566
1987	6	490	62	6	30		103		697
1988	14	219	22	7	0		114		376
1989	29	269	133	10	60	60	180	68	809
1990	24	301	31	4	0	0	301	82	743
1991	0	100	61		7	32	179	8	387
1992	164	1,242	90	50	17	138	163	22	1,886
1993	57	321	141	28	2	79	107	142	877
1994	267	292	66			62	147	114	948
1995	13	260	11			72	47	31	434
1996	134	351	149			27	54	338	1,053
1997	204	271	25			12	116	32	660
1998	230	246	89			9	183	135	892
1999	56	301	64			54	98	78	651
2000	47	86	86			32	0	90	341
2001	601	2,037	268			163	217	232	3,518
2002	239	216	95			13	353	0	916
2003	240	71	239			0	54	0	604
2004	245	262	56			0	85	0	648
2005	66	124	111			23	158	76	558
2006	276	288	59			0	140	180	943
2007	0	17	34	0		3	45	21	120
2008	83	41	33	0		0	15	231	403
2009	51	45	0			0	17	0	113
2010	103	300	187	0		0	310	217	1,117
2011				No Surveys Conducted					0
Averages									
84-10	151	346	84			35	166	95	873
01-10	190	340	108			20	139	96	894

Appendix B. 20. Stikine River sockeye salmon run size, 1979–2011.

Harvest includes test and assesment fisheries and otolith samples and escapement includes fish later captured for broodstock

	Stikine River					All Tahltan				
Year	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run
1979	40,353	13,534	26,819	8,299	48,652	17,472	7,261	10,211	5,076	22,548
1980	62,743	20,919	41,824	23,206	85,949	19,137	8,119	11,018	11,239	30,376
1981	138,879	27,017	111,862	27,538	166,417	65,968	15,178	50,790	16,189	82,157
1982	68,761	20,540	48,221	42,482	111,243	42,493	14,236	28,257	20,981	63,474
1983	71,683	21,120	50,563	5,774	77,457	32,684	11,428	21,256	5,075	37,759
1984	76,211	5,327	70,884	7,750	83,961	37,571	4,794	32,777	3,114	40,685
1985	184,747	26,804	157,943	29,747	214,494	86,008	18,682	67,326	25,197	111,205
1986	69,036	17,846	51,190	6,420	75,456	31,015	10,735	20,280	2,757	33,771
1987	39,264	11,283	27,981	4,077	43,342	11,923	4,965	6,958	2,255	14,178
1988	41,915	16,538	25,377	3,181	45,096	7,222	4,686	2,536	2,129	9,351
1989	75,058	21,639	53,419	15,492	90,550	14,111	5,795	8,316	1,561	15,672
1990	57,529	19,964	37,565	9,856	67,385	23,982	9,055	14,927	2,307	26,289
1991	120,153	25,138	95,015	31,284	151,437	67,394	17,259	50,135	21,916	89,311
1992	154,541	29,242	125,299	77,394	231,935	76,680	16,773	59,907	28,218	104,899
1993	176,100	52,698	123,402	104,630	280,730	84,068	32,458	51,610	40,036	124,104
1994	127,527	53,380	74,147	80,509	208,036	77,239	37,728	39,511	65,101	142,340
1995	142,308	66,777	75,531	76,420	218,728	82,290	50,713	31,577	51,665	133,955
1996	184,400	90,148	94,252	188,385	372,785	95,706	57,545	38,161	147,435	243,141
1997	125,657	68,197	57,460	101,258	226,915	37,319	25,214	12,105	43,408	80,727
1998	90,459	50,486	39,973	30,989	121,448	27,941	15,673	12,268	7,086	35,027
1999	65,879	47,202	18,677	58,765	124,644	35,918	25,599	10,319	23,449	59,367
2000	53,145	31,535	21,610	25,359	78,504	13,803	8,133	5,670	5,340	19,143
2001	103,755	29,341	74,414	23,500	127,255	20,985	6,224	14,761	6,339	27,324
2002	71,253	22,607	48,646	8,076	79,329	25,680	11,460	14,220	2,055	27,735
2003	194,425	69,571	124,854	46,552	240,977	81,808	28,275	53,533	16,298	98,106
2004	189,395	88,451	100,944	122,592	311,987	125,677	62,725	62,952	91,535	217,213
2005	167,570	88,089	79,482	92,362	259,932	110,903	67,857	43,046	63,714	174,617
2006	193,768	102,733	91,035	74,817	268,585	130,174	76,719	53,455	54,923	185,097
2007	110,132	61,472	48,660	86,654	196,786	59,537	38,663	20,874	63,330	122,867
2008	74,267	37,097	37,170	45,942	120,209	28,592	18,176	10,416	17,743	46,335
2009	111,780	51,082	60,699	73,495	185,275	60,428	30,104	30,324	37,664	98,092
2010	116,354	55,471	60,883	40,647	157,001	48,521	25,819	22,702	17,565	66,086
2011	139,541	61,947	77,594	73,857	213,399	65,226	30,978	34,248	37,480	102,706
Averages										
79-10	109,345	41,976	67,369	49,170	158,516	52,508	24,002	28,506	28,209	80,717
01-10	133,270	60,591	72,679	61,464	194,734	69,231	36,602	32,628	37,117	106,347

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Appendix B. 20. Continued.

	Stikine Mainstem					Tuya				
Year	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run
1979	22,880	6,273	16,608	3,223	26,103					
1980	43,606	12,800	30,806	11,967	55,573					
1981	72,911	11,839	61,072	11,349	84,260					
1982	26,267	6,304	19,964	21,501	47,768					
1983	38,999	9,692	29,307	699	39,698					
1984	38,640	533	38,107	4,636	43,276					
1985	98,739	8,122	90,617	4,550	103,289					
1986	38,022	7,111	30,910	3,663	41,685					
1987	27,342	6,318	21,023	1,822	29,164					
1988	34,693	11,852	22,841	1,052	35,745					
1989	60,947	15,844	45,103	13,931	74,878					
1990	33,547	10,909	22,638	7,549	41,096					
1991	52,759	7,879	44,880	9,368	62,126					
1992	77,861	12,469	65,392	49,176	127,037					
1993	92,033	20,240	71,792	64,594	156,627					
1994	50,288	15,652	34,636	15,408	65,696					
1995	57,802	14,953	42,850	24,169	81,971	2,216	1,112	1,104	586	2,802
1996	69,536	23,684	45,852	21,508	91,044	19,158	8,919	10,239	19,442	38,600
1997	59,600	22,164	37,436	20,330	79,930	28,738	20,819	7,919	37,520	66,258
1998	31,077	11,902	19,175	7,962	39,039	31,442	22,911	8,531	15,941	47,383
1999	13,797	7,726	6,071	20,092	33,889	16,165	13,877	2,288	15,224	31,389
2000	18,563	8,431	10,132	6,764	25,327	20,779	14,971	5,808	13,255	34,034
2001	54,987	14,132	40,855	4,193	59,180	27,783	8,985	18,798	12,968	40,751
2002	35,496	5,222	30,274	1,963	37,459	10,078	5,925	4,153	4,058	14,136
2003	81,803	23,831	57,972	21,494	103,297	30,814	17,465	13,349	8,760	39,574
2004	58,809	22,080	36,728	26,799	85,608	4,909	3,645	1,264	4,257	9,166
2005	53,343	18,555	34,788	28,517	81,860	3,325	1,677	1,648	131	3,456
2006	35,788	8,185	27,603	9,772	45,560	27,806	17,829	9,977	10,122	37,928
2007	32,418	11,553	20,865	5,274	37,692	18,176	11,256	6,920	18,050	36,227
2008	21,494	5,316	16,178	10,434	31,928	24,180	13,604	10,576	17,765	41,945
2009	24,082	6,933	17,148	17,304	41,385	27,271	14,044	13,226	18,527	45,798
2010	34,152	9,320	24,831	11,018	45,169	33,682	20,332	13,350	12,064	45,746
2011	45,750	16,357	29,393	19,021	64,771	28,565	14,612	13,953	17,356	45,921
Averages										
79-10	46,634	11,807	34,827	14,440	61,074					
01-10	43,237	12,513	30,724	13,677	56,914	20,802	11,476	9,326	10,670	31,473

Appendix B. 21. Coho salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2011.

Table only includes years when test fisheries were operated.

Year	106-41/42	106-30	Total 106	108
1984	101		1,370	11
1985	301		4,345	11
1986	177		1,345	3
1987	799	95	3,558	13
1988	89	589	1,036	9
1989	275	412	2,080	45
1990	432	464	2,256	45
1991				18
1992				23
1993				0
1994			12	
---				142
1998				217
1999				140
2000				

2009				0

Appendix B. 22. Annual harvest of coho salmon in the Canadian lower and upper river commercial, Telegraph Aboriginal and the Canadian test fisheries, 1979–2011.

			Telegraph	Canada total	Test				All
Year	LRCF	URCF	Aboriginal	Stikine harvest	Drift	Set	Additional	Test total	harvest total
1972			0	0				0	0
1973			0	0				0	0
1974			0	0				0	0
1975		45	5	50				0	50
1976		13	0	13				0	13
1977		0	0	0				0	0
1978		0	0	0				0	0
1979	10,720		0	10,720				0	10,720
1980	6,629	40	100	6,769				0	6,769
1981	2,667	0	200	2,867				0	2,867
1982	15,904	0	40	15,944				0	15,944
1983	6,170	0	3	6,173				0	6,173
1984			1	1				0	1
1985	2,172	0	3	2,175				0	2,175
1986	2,278	0	2	2,280	226			226	2,506
1987	5,728	0	3	5,731	162	620		782	6,513
1988	2,112	0	5	2,117	75	130		205	2,322
1989	6,092	0	6	6,098	242	502		744	6,842
1990	4,020	0	17	4,037	134	271		405	4,442
1991	2,638	0	10	2,648	118	127		245	2,893
1992	1,850	0	5	1,855	75	193	0	268	2,123
1993	2,616	0	0	2,616	37	136	2	175	2,791
1994	3,377	0	4	3,381	71	0	0	71	3,452
1995	3,418	0	0	3,418	35	166	26	227	3,645
1996	1,402	0	2	1,404	55	0	0	55	1,459
1997	401	0	0	401	11			11	412
1998	726	0	0	726	207			207	933
1999	181	0	0	181	312	64	16	392	573
2000	298	0	3	301	60	181	195	436	737
2001	233	0	0	233	257	1,078	426	1,761	1,994
2002	82	0	0	82	306	1,323	1,116	2,745	2,827
2003	190	0	0	190	291	525	883	1,699	1,889
2004	271	0	4	275	352	135	0	487	762
2005	276	0	0	276	444	271	0	715	991
2006	72	0	0	72	343	181	0	524	596
2007	50	0	2	52	89	99	0	188	240
2008	2,398	0	0	2,398	321	216	0	537	2,935
2009	5,981	0	0	5,981	348	146	0	494	6,475
2010	5,301	0	0	5,301	488	253	0	741	6,042
2011	5,821	0	0	5,821	280	130	0	410	6,231
Averages									
85-10	2,083	0	3	2,086	202	301	157	552	2,637
01-10	1,485	0	1	1,486	324	423	243	989	2,475

Appendix B. 23. Index counts of Stikine coho salmon escapements, 1984–2011.

Missing data due to poor survey conditions.

Year Date	Katete West	Katete	Craig	Verrett	Bronson Slough	Scud Slough	Porcupine	Christina	Total
1984 10/30	147	313	0	15	42				517
1985 10/25	590	1,217	735	39	0	924	365		3,870
1988 10/28	32	227		175		97	53	0	584
1989 10/29	336	896	992	848	120	707	90	55	4,044
1990 10/30	94	548	810	494		664	430		3,040
1991 10/29	302	878	985	218		221	352		2,956
1992 10/29	295	1,346	949	320		462	316		3,688
1993 10/30						206	324		
1994 11/1-2	28	652	1,026	466		448	1,105		3,725
1995 10/30	211	208	1,419	574		621	719		3,752
1996 10/30	163	232	205	549		630	1,466		3,245
1997 11/01	2	0	19	116		272	648		1,057
1998 10/30	14	63	141	282		143	450		1,093
1999 11/05	163	773	891	490		661	894		3,872
2000 11/2-3				5		95	206		306
2001 11/2-3	207	1,401	3,121	708		1,571	397		7,405
2002 11/05	806	2,642	4,488	1,695		1,389	1,626		12,646
2003									
2004[a] 11/03	78	762	19	959		173	1,009		3,000
2005 10/31	300	1,195	444	353		218	689		3,199
2006 11/02	350	543	675	403		95	147		2,213
2007 11/10	66	190	567	240		153	341		1,557
2008[b] 11/01-05			535	501		86	25		1,147
2009 11/02	212	698	475	257		16	617		2,275
2010 11/03a	37	237	31	363		130	953		1,751
2011 11/04	182	689	459	309		437	468		2,542
Average									
84-10	214	735	926	457		434	575		3,201
01-10	257	959	1,151	609		426	645		3,910

[a] Veiwing conditions at the Craig River site were poor in 2004 and 2010.

[b] West Katete and Katete not survey due to inclement weather

[c] aborted to due ice condtions and inclement weather

Appendix B. 24. Effort in the Canadian fisheries, including assessment fisheries in the Stikine River, 1979–2011.

	LRCF		URCF		Assessment/Test Fisheries			
					standard test fisheries		Chinook Assessment a	
Year	Days	Permit Days	Days	Permit Days	# of Drift	Set hours	Days	Permit Days
1979[b]	42.0	756						
1980	41.0	668						
1981	32.0	522	5.0	11.0				
1982	71.0	1,063	4.0	8.0				
1983	54.0	434	8.0	10.0				
1984		no fisheries						
1985	22.5	146	6.0	14.0				
1986	13.5	239	7.0	19.0	405			
1987	20.0	287	7.0	20.0	845	1,456		
1988	26.5	320	6.5	21.5	720	1,380		
1989	23.0	325	7.0	14.0	870	1,392		
1990	29.0	328	7.0	15.0	673	1,212		
1991	39.0	282	6.0	13.0	509	1,668		
1992	55.0	235	13.0	28.0	312	1,249		
1993	58.0	484	22.0	48.0	304	1,224		
1994	74.0	430	50.0	68.0	175	456		
1995	59.0	534	25.0	54.0	285	888		
1996	81.0	439	59.0	75.0	245	312		
1997	89.0	569	29.0	42.0	210			
1998	46.5	374	19.0	19.0	820			
1999	31.0	261	18.0	19.0	1,006	1,577		
2000	23.3	227	9.3	19.8	694	3,715		
2001	23.0	173	4.0	6.0	883	2,688		
2002	21.0	169	9.0	12.0	898	2,845		
2003	28.8	275	10.0	10.0	660	1,116		
2004	43.0	431	11.0	11.0	778	524		
2005	72.0	803	13.0	13.0	780	396		
2006	68.7	775	15.0	15.0	720	312		
2007	67.5	767	17.0	17.0	224	336		
2008	55.0	566	13.0	13.0	730	396		
2009	57.5	563	27.0	28.0	771	342		
2010	37.3	349	12.0	15.0	860	468	8	94
2011	41.5	607	9.0	12.0	882	335	6	110
Averages								
85-10	45	398	16	24	615	1,180		
01-10	47	487	13	14	730	942		

[a] denotes an assessment/test fishery prosecuted with the commercial fleet

Appendix B. 25. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959–2011.

	Weir	Date of Arrival			Weir	Total	Total		Samples	Otolith	Spawners		
Year	Installed	First	50%	90%	Pulled	Count	escapement	Broodstock	or ESSR	Samples	Total	Enhanced	Wild
1959	30-Jun	2-Aug	12-Aug	16-Aug		4,311	4,311						
1960	15-Jul	2-Aug	24-Aug	27-Aug		6,387	6,387						
1961	20-Jul	9-Aug	11-Aug	15-Aug		16,619	16,619						
1962	1-Aug	2-Aug	5-Aug	8-Aug		14,508	14,508						
1963	3-Aug					1,780	1,780						
1964	23-Jul	26-Jul	14-Aug	25-Aug		18,353	18,353						
1965	19-Jul	18-Jul	2-Sep	7-Sep		1,471	1,471						
1966	12-Jul	3-Aug	13-Aug	21-Aug		21,580	21,580						
1967	11-Jul	14-Jul	21-Jul	28-Jul		38,801	38,801						
1968	11-Jul	21-Jul	25-Jul	8-Aug		19,726	19,726						
1969	7-Jul	11-Jul	18-Jul	31-Jul		11,805	11,805						
1970	5-Jul	25-Jul	1-Aug	11-Aug		8,419	8,419						
1971	12-Jul	19-Jul	28-Jul	12-Aug		18,523	18,523						
1972	13-Jul	13-Jul	19-Jul	31-Aug	21-Aug	52,545	52,545						
1973	10-Jul	24-Jul	30-Jul	7-Aug	1-Sep	2,877	2,877						
1974	3-Jul	28-Jul	3-Aug	17-Aug	13-Sep	8,101	8,101						
1975	10-Jul	25-Jul	8-Aug	17-Aug	28-Aug	8,159	8,159						
1976	16-Jul	29-Jul	1-Aug	6-Aug	24-Aug	24,111	24,111						
1977	6-Jul	11-Jul	16-Jul	10-Aug	25-Aug	42,960	42,960						
1978	10-Jul	10-Jul	20-Jul	29-Jul	26-Aug	22,788	22,788						
1979	9-Jul	23-Jul	1-Aug	11-Aug	31-Aug	10,211	10,211						
1980	4-Jul	15-Jul	22-Jul	12-Aug	3-Sep	11,018	11,018						
1981	30-Jun	16-Jul	26-Jul	3-Aug	8-Sep	50,790	50,790						
1982	2-Jul	10-Jul	19-Jul	29-Jul	4-Sep	28,257	28,257						
1983	27-Jun	5-Jul	22-Jul	5-Aug	7-Sep	21,256	21,256						
1984	20-Jun	19-Jul	24-Jul	3-Aug	29-Aug	32,777	32,777						
1985	28-Jun	18-Jul	31-Jul	6-Aug	5-Sep	67,326	67,326						
1986	10-Jul	26-Jul	4-Aug	11-Aug	4-Sep	20,280	20,280						
1987	14-Jul	21-Jul	4-Aug	13-Aug	27-Aug	6,958	6,958						
1988	16-Jul	16-Jul	6-Aug	14-Aug	29-Aug	2,536	2,536						
1989	7-Jul	9-Jul	1-Aug	14-Aug	4-Sep	8,316	8,316	2,210			6,106		
1990	6-Jul	15-Jul	26-Jul	3-Aug	28-Aug	14,927	14,927	3,302			11,625		
1991	30-Jun	17-Jul	25-Jul	7-Aug	5-Sep	50,135	50,135	3,552			46,583		
1992	9-Jul	18-Jul	25-Jul	3-Aug	2-Sep	59,907	59,907	3,694			56,213		
1993	7-Jul	10-Jul	28-Jul	10-Aug	11-Sep	53,362	51,610	4,506	1,752		47,104	1,030	46,074
1994	7-Jul	14-Jul	30-Jul	9-Aug	7-Sep	46,363	39,511	3,378	6,852		36,133	6,172	29,961
1995	8-Jul	9-Jul	24-Jul	12-Aug	16-Sep	42,317	31,577	4,902	10,740		26,675	10,084	16,591
1996	6-Jul	14-Jul	22-Jul	04-Aug	10-Sep	52,500	38,161	4,402	14,339		33,759	3,936	29,823
1997	9-Jul	15-Jul	25-Jul	26-Aug	26-Sep	12,483	12,105	2,294		378	9,811	1,982	7,829
1998	9-Jul	11-Jul	25-Jul	26-Aug	17-Sep	12,658	12,268	3,099		390	9,169	616	8,553
1999	10-Jul	19-Jul	31-Jul	13-Aug	15-Sep	10,748	10,319	2,870		429	7,449	497	6,952
2000	9-Jul	21-Jul	25-Jul	03-Aug	4-Sep	6,076	5,670	1,717		406	3,953	801	3,152
2001	08-Jul	19-Jul	31-Jul	09-Aug	14-Sep	14,811	14,761	2,386		50	12,375	4,900	7,475
2002	07-Jul	12-Jul	25-Jul	08-Aug	14-Sep	17,740	17,340	3,051		400	11,169	3,799	7,370
2003	07-Jul	11-Jul	29-Jul	08-Aug	18-Sep	53,933	53,533	3,946		400	49,587	21,694	27,893
2004	07-Jul	12-Jul	25-Jul	10-Aug	15-Sep	63,372	62,952	4,243		420	58,709	29,994	28,715
2005	07-Jul	11-Jul	04-Aug	25-Aug	15-Sep	43,446	43,046	3,424		400	39,622	16,420	23,202
2006	09-Jul	12-Jul	27-Jul	20-Aug	13-Sep	53,855	53,455	3,403		400	50,052	24,126	25,926
2007	09-Jul	20-Jul	08-Aug	19-Aug	15-Sep	21,074	20,874	2,839		200	18,035	7,673	10,362
2008	13-Jul	21-Jul	30-Jul	10-Aug	18-Sep	10,516	10,416	2,364		100	8,052	4,143	3,909
2009	09-Jul	13-Jul	18-Jul	04-Aug	14-Sep	30,673	30,324	3,011		349	27,313	4,941	23,272
2010	07-Jul	10-Jul	29-Jul	12-Aug	15-Sep	22,860	22,702	4,484		158	18,218	7,789	10,429
2011	09-Jul	13-Jul	18-Jul	07-Aug	31-Aug	34,588	34,248	4,559		340	29,689	10,248	19,441
Averages													
59-10	09-Jul	18-Jul	30-Jul	11-Aug	06-Sep	24,948	24,214						
01-10	08-Jul	14-Jul	28-Jul	12-Aug	15-Sep	33,228	32,940	3,315		288	29,313	16,855	12,458

Appendix B. 26. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984–2011.

	Weir	Date of Arrival			Total	Total	Date and	Smolt	
Year	Installed	First	50%	90%	Count	Estimate	Expansion	Natural	Hatchery
1984	10-May	11-May	23-May	06-Jun		218,702			
1985	25-Apr	23-May	31-May	28-May		613,531			
1986	08-May	10-May	31-May	07-Jun		244,330			
1987[a]	07-May	15-May	23-May	24-May		810,432			
1988	01-May	08-May	20-May	06-Jun		1,170,136			
1989	05-May	08-May	22-May	06-Jun		580,574			
1990[b]		15-May	29-May	05-Jun	595,147	610,407	6/14 97.5%		
1991[c]	05-May	14-May	21-May	30-May	1,439,676	1,487,265	6/13 96.8%	1,220,397	266,868
1992[d]	07-May	13-May	21-May	27-May	1,516,150	1,555,026	6/14 97.5%	750,702	804,324
1993	07-May	11-May	17-May	22-May		3,255,045		2,855,562	399,483
1994	08-May	08-May	16-May	12-Jun		915,119		620,809	294,310
1995	05-May	06-May	13-May	11-Jun		822,284		767,027	55,257
1996	11-May	11-May	20-May	25-May		1,559,236		1,408,020	151,216
1997	07-May	11-May	23-May	30-May		518,202		348,685	169,517
1998	07-May	08-May	25-May	05-Jun		540,866		326,420	214,446
1999	06-May	10-May	09-Jun	15-Jun		762,033		468,488	293,545
2000	07-May	09-May	22-May	17-Jun		619,274		355,618	263,656
2001	06-May	07-May	24-May	18-Jun		1,495,642		841,268	654,374
2002	06-May	14-May	27-May	12-Jun		1,873,598		1,042,435	831,163
2003	06-May	11-May	29-May	06-Jun		1,960,480		979,442	981,038
2004	06-May	10-May	21-May	25-May		2,116,701		825,513	1,291,188
2005	06-May	07-May	17-May	25-May		1,843,804		943,929	899,875
2006	06-May	10-May	25-May	02-Jun		2,195,266		1,773,062	422,204
2007	06-May	16-May	21-May	28-May		1,055,114		644,987	410,127
2008	06-May	12-May	23-May	02-Jun		1,402,995		870,295	532,700
2009	06-May	14-May	26-May	01-Jun		746,045		484,929	261,116
2010	06-May	10-May	23-May	07-Jun		557,532		306,344	251,188
2011	07-May	17-May	26-May	01-Jun		1,632,119		960,531	671,588
Averages									
84-10	06-May	11-May	23-May	03-Jun		1,167,764		891,697	472,380
01-10	06-May	11-May	23-May	03-Jun		1,524,718		871,220	653,497

[a] Estimate includes approximately 30,000 mortalities from overcrowding on May 22, 1987.

[b] Estimate of 595,147 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

[c] Estimate of 1,439,673 on June 13 expanded by average % of outmigration by date (96.8%) from historical data.

[d] Estimate of 1,516,150 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

Appendix B. 27. Weir counts of Chinook salmon at Little Tahltan River, 1985–2011.

	Weir	Date of Arrival			Total	Broodstock	Natural
Year	Installed	First	50%	90%	Count	and Other	Spawners
Large Chinook							
1985	03-Jul	04-Jul	30-Jul	06-Aug	3,114		3,114
1986	28-Jun	29-Jun	21-Jul	05-Aug	2,891		2,891
1987	28-Jun	04-Jul	24-Jul	02-Aug	4,783		4,783
1988	26-Jun	27-Jun	18-Jul	03-Aug	7,292		7,292
1989	25-Jun	26-Jun	23-Jul	02-Aug	4,715		4,715
1990	22-Jun	29-Jun	23-Jul	04-Aug	4,392		4,392
1991	23-Jun	25-Jun	20-Jul	03-Aug	4,506		4,506
1992	24-Jun	04-Jul	21-Jul	30-Jul	6,627	-12	6,615
1993	20-Jun	21-Jun	16-Jul	28-Jul	11,449	-12	11,437
1994	18-Jun	28-Jun	22-Jul	02-Aug	6,387	-14	6,373
1995	17-Jun	20-Jun	17-Jul	04-Aug	3,072	0	3,072
1996	17-Jun	26-Jun	16-Jul	30-Jul	4,821	0	4,821
1997	14-Jun	22-Jun	16-Jul	29-Jul	5,557	-10	5,547
1998	13-Jun	19-Jun	14-Jul	29-Jul	4,879	-6	4,873
1999	18-Jun	27-Jun	19-Jul	1-Aug	4,738	-5	4,733
2000	19-Jun	23-Jun	21-Jul	5-Aug	6,640	-9	6,631
2001	20-Jun	23-Jun	18-Jul	2-Aug	9,738	-8	9,730
2002	20-Jun	23-Jun	18-Jul	27-Jul	7,490	-14	7,476
2003	20-Jun	20-Jun	19-Jul	6-Aug	6,492	0	6,492
2004	18-Jun	19-Jun	20-Jul	31-Jul	16,381	0	16,381
2005	19-Jun	21-Jun	22-Jul	4-Aug	7,387	0	7,387
2006	20-Jun	26-Jun	21-Jul	29-Jul	3,860	0	3,860
2007	4-Jul	10-Jul	29-Jul	4-Aug	562	0	562
2008	19-Jun	6-Jul	26-Jul	4-Aug	2,663	0	2,663
2009	19-Jun	3-Jul	19-Jul	4-Aug	2,245	0	2,245
2010	19-Jun	22-Jun	23-Jul	2-Aug	1,057	0	1,057
2011	19-Jun	22-Jun	23-Jul	2-Aug	1,753	0	1,753
Averages							
85-10	21-Jun	26-Jun	20-Jul	01-Aug	5,528		5,385
01-10	20-Jun	26-Jun	21-Jul	02-Aug	5,788	-2	5,785
nonlargeChinook[a]							
1985	03-Jul	04-Jul	31-Jul	10-Aug	316		3,430
1986	28-Jun	03-Jul	25-Jul	06-Aug	572		3,463
1987	28-Jun	03-Jul	26-Jul	06-Aug	365		5,148
1988	26-Jun	27-Jun	17-Jul	02-Aug	327		7,619
1989	25-Jun	26-Jun	23-Jul	02-Aug	199		4,914
1990	22-Jun	05-Jul	22-Jul	30-Jul	417		4,809
1991	23-Jun	03-Jul	24-Jul	07-Aug	313		4,819
1992	24-Jun	12-Jul	22-Jul	30-Jul	131		6,758
1993	20-Jun	30-Jun	14-Jul	01-Aug	60		11,509
1994	18-Jun	02-Jul	22-Jul	05-Aug	121		6,508
1995	17-Jun	22-Jun	28-Jul	10-Aug	135		3,207
1996	17-Jun	12-Jul	25-Jul	05-Aug	22		4,843
1997	14-Jun	26-Jun	21-Jul	1-Aug	54		5,611
1998	13-Jun	26-Jun	20-Jul	7-Aug	37		4,916
1999	18-Jun	1-Jul	23-Jul	6-Aug	202		4,940
2000	19-Jun	23-Jun	20-Jul	5-Aug	108		6,748
2001	20-Jun	23-Jun	27-Jul	3-Aug	269		10,007
2002	20-Jun	26-Jun	21-Jul	7-Aug	618		8,108
2003	20-Jun	30-Jun	21-Jul	5-Aug	334		6,826
2004	18-Jun	21-Jun	19-Jul	31-Jul	250		16,631
2005	19-Jun	29-Jun	23-Jul	4-Aug	231		7,618
2006	20-Jun	7-Jul	23-Jul	5-Aug	93		3,953
2007	04-Jul	15-Jul	29-Jul	1-Aug	12		574
2008	19-Jun	14-Jul	25-Jul	29-Jul	139		2,802
2009	19-Jun	9-Jul	19-Jul	4-Aug	99		2,344
2010	19-Jun	7-Jul	26-Jul	4-Aug	221		1,278
2011	27-Jun	7-Jul	26-Jul	4-Aug	194		1,947
Averages							
85-12	21-Jun	01-Jul	22-Jul	03-Aug	217		5,746
03-12	20-Jun	03-Jul	23-Jul	03-Aug	227		6,014

Appendix B. 28. Historical pink and chum salmon harvest in the Canadian fisheries, 1979–2011.

	LSCF		USCF		FSC		Test	
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1972					0	0		
1973					0	0		
1974					0	0		
1975			0	0	0	0		
1976			0	0	0	0		
1977			0	0	0	0		
1978			0	0	0	0		
1979	1,994	424			0	0	1,994	424
1980	736	771	20	0	0	0	756	771
1981	3,713	1,128	0	0	144	0	3,857	1,128
1982	1,782	722	0	0	60	0	1,842	722
1983	1,043	274	0	4	77	26	1,120	304
1984					62	0	62	0
1985	2,321	532	0	0	35	4	2,356	536
1986	107	295	0	0	0	12	107	307
1987	646	432	0	19	0	8	646	459
1988	418	730	0	0	0	3	418	733
1989	825	674	0	0	0	0	825	674
1990	496	499	0	0	0	0	496	499
1991	394	208	0	0	0	0	394	208
1992	122	231	0	0	0	0	122	231
1993	29	395	0	0	0	0	29	395
1994	89	173	1	0	0	0	90	173
1995	48	256	0	0	0	7	48	263
1996	25	229	0	0	0	3	25	232
1997	269	222	0	0	0	0	269	222
1998	55	13	0	0	0	0	55	13
1999	11	8	0	0	0	0	11	8
2000	181	144	0	0	0	0	181	144
2001	78	56	0	0	0	0	78	56
2002	19	33	0	0	0	0	19	33
2003	850	112	0	0	0	0	850	112
2004	8	134	0	0	0	0	8	134
2005	0	39	0	0	0	0	0	39
2006	0	14	0	0	4	0	4	14
2007	0	2	0	0	0	0	0	2
2008	88	90	0	0	0	0	88	90
2009	362	193	0	0	0	0	362	193
2010	209	122	0	0	0	0	209	122
2011	3	99	0	0	0	0	3	99

Appendix C. 1. Weekly Chinook salmon harvest in the U.S. fisheries in D111, 2011.

ONLY inseason reference see the historcial Appendix D2 for final postseason estimate.All inseason estimates are based on CWT for sport, gillent, and troll harvest.

	PU	D111sport			D111 gillnet				D111 troll			US total large	D111 Seine
SW	Large Taku	Large total	Large hatchery	Large Taku	Nonlarge	Large total	Large hatchery	Large Taku	Large total	Large hatchery	Large Taku	Taku	non-Taku
18		41		41								41	
19		109		109								109	
20		75		75								75	
21		129		129								129	
22		209	31	178								178	
23		199	26	173								173	
24		179	69	110								110	
25		105	0	105				0				105	
26		116	28	88	385	267	53	214				302	
27	16	66	44	22	488	237	33	204				242	2
28	8	34	0	34	68	137		137				179	18
Total	24	1,261	198	1,063	941	641	86	555	0	0	0	1,642	20

Appendix C. 2. Weekly Chinook salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River 2011.

	Inseason	Commercial		Test fishery		Aboriginal			Total large	Above Border
SW	Aboveborder	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Rec	Harvest	Escapement
18		96	4						96	
19	2,022	316	32						316	
20	6,335	509	66						509	
21	7,659	786	138						786	
22	8,881			251	59				251	
23	10,074			177	16				177	
24	12,135			159	31				159	
25	13,350			93	28				0	
26	14,325	193	115						193	
27	14,797	212	61						212	
28	15,009	159	58						159	
29		45	22						45	
30		18	11						18	
31		6	3						6	
32		1	4						1	
33		0							0	
34		1							1	
Postseason estimate	31,469	2,342	514	680	134	150	21	105	3,277	27,523

Appendix C. 3. Weekly sockeye salmon harvest of Alaskan D111 traditional and terminal common property commercial drift gillnet fishery, 2011.

		Traditional StatArea specific harvests				Terminal
SW	D11 Total	111-32	111-31/90	111-20	111-34	111-(33-35)
25						
26	2,143	2,093	50			
27	4,531	4,444	87			
28	8,487	8,226	261			
29	18,938	17,237	1,504	197		
30	9,833	7,501	1,745	587		
31	18,132	13,203	2,117	2,812		
32	20,306	16,837	2,109	1,360		
33	13,354	6,725	4,892	1,737		
34	62,781	1,143	343	147		61,148
35	2,900	719	850	223	351	757
36	2,236	783	3	22		1,428
37	217	45	9			163
38	34	34				
39	4	4				
40	0	0				
41						
Total	163,896	78,994	13,970	7,085	351	63,496

Appendix C. 4. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery, 2011.

Appendix C. 8. Weekly coho salmon mark-recapture estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2011.
Enhanced estimates based on harvest expanations of thermally marked fish. Does not inlcude Port Snettisham harvests.

	Taku harvest proportions														
				Little Trapper		Tatsamenie		Total	Wild			U.S.	Stikine	Total	Total
SW	Kuthai	King Salmon	Mainstem	Wild	Enhanced	Wild	Enhanced	Taku	Crescent	Speel	Snett.	Enhanced	Enhanced	Enhanced	wild
25								0.000			0.000			0.000	1.000
26	0.288	0.216	0.405	0.000	0.000	0.079	0.000	0.988	0.012	0.000	0.012	0.000	0.000	0.000	1.000
27	0.215	0.288	0.361	0.038	0.010	0.041	0.010	0.963	0.000	0.023	0.023	0.002	0.012	0.034	0.966
28	0.038	0.052	0.373	0.145	0.035	0.190	0.021	0.853	0.057	0.057	0.114	0.019	0.014	0.089	0.911
29	0.028	0.049	0.556	0.000	0.045	0.133	0.067	0.879	0.039	0.024	0.063	0.057	0.001	0.170	0.830
30	0.009	0.058	0.415	0.000	0.016	0.217	0.070	0.785	0.051	0.000	0.051	0.163	0.001	0.250	0.750
31	0.000	0.000	0.398	0.083	0.007	0.201	0.062	0.751	0.000	0.034	0.034	0.212	0.002	0.284	0.716
32	0.000	0.000	0.408	0.063	0.002	0.135	0.027	0.635	0.000	0.013	0.013	0.352	0.000	0.381	0.619
33	0.000	0.000	0.251	0.081	0.003	0.032	0.014	0.382	0.000	0.050	0.050	0.566	0.002	0.585	0.415
34	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
35	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
36	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
37	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
38	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
39	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
40	0.000	0.000	0.141	0.065	0.000	0.022	0.000	0.228	0.000	0.033	0.033	0.738	0.002	0.739	0.261
41								0.000			0.000			0.000	1.000
Total	0.025	0.037	0.397	0.055	0.016	0.135	0.040	0.707	0.018	0.027	0.045	0.246	0.003	0.305	0.695
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	617	464	869	0	0	168	0	2,118	25	0	25	0	0	0	2,143
27	973	1,306	1,638	172	45	185	45	4,363	0	103	103	9	56	155	4,376
28	322	437	3,165	1,232	295	1,610	179	7,241	487	481	968	158	120	753	7,734
29	535	936	10,522	0	853	2,522	1,275	16,644	741	457	1,198	1,077	18	3,224	15,714
30	91	570	4,081	0	155	2,132	690	7,718	498	0	498	1,603	14	2,462	7,371
31	0	0	7,223	1,502	127	3,653	1,121	13,626	0	611	611	3,851	44	5,142	12,990
32	0	0	8,279	1,274	43	2,751	553	12,898	0	257	257	7,151	0	7,746	12,560
33	0	0	3,358	1,087	41	431	183	5,101	0	669	669	7,556	28	7,808	5,546
34	0	0	230	106	0	36	0	372	0	54	54	1,205	3	1,207	426
35	0	0	252	117	0	39	0	408	0	59	59	1,322	3	1,325	467
36	0	0	114	53	0	18	0	184	0	27	27	596	1	597	211
37	0	0	8	4	0	1	0	12	0	2	2	40	0	40	14
38	0	0	5	2	0	1	0	8	0	1	1	25	0	25	9
39	0	0	1	0	0	0	0	1	0	0	0	3	0	3	1
40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,538	3,714	39,743	5,548	1,557	13,548	4,047	70,693	1,752	2,721	4,473	24,595	288	30,487	69,562

Appendix C. 5. Weekly sockeye salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2011.

	Above Border	Commercial				Above Border
SW	Run	All	Taku	Test	Aboriginal	Escapement
22						
23						
24					5	
25		17	17		4	
26	10,365	869	869		0	
27	33,882	837	828		5	
28	35,196	2,117	2,094		2	
29	47,847	1,391	1,391		1	
30	80,335	4,668	4,593		0	
31	97,419	4,355	4,327		0	
32	114,510	4,900	4,900		8	
33	123,489	2,415	2,415		16	
34	132,472	1,001	1,001	232	67	
35	132,472	502	502	143	2	
36	133,107	828	828	127	3	
37		56	56	19	0	
38	136,861	72	72	0	0	
39		4	4	0		
40		0		0		
41				0	11	
Postseason Expanded	139,926	24,032	23,898	521	124	115,383

Appendix C. 6. Estimates of wild and enhanced sockeye salmon stock harvested in the Canadian commercial fishery in the Taku River by week, 2011.

Taku wild stock composition estimates are historical averages.

Enhanced estimates based on harvest expanations of thermally marked fish. Does not inlcude Port Snettisham harvests.

				Little Trapper		Tatsamenie		Stikine	US	Taku
SW	Kuthai	King Salmon	Mainstem	Wild	Enhanced	Wild	Enhanced	Enhanced	Enhanced	Wild
22-24										1.000
25	0.516	0.258	0.150	0.000	0.000	0.071	0.005	0.000	0.000	0.995
26	0.516	0.258	0.150	0.000	0.000	0.071	0.005	0.000	0.000	0.995
27	0.434	0.175	0.286	0.061	0.005	0.000	0.028	0.011	0.000	0.956
28	0.223	0.270	0.345	0.087	0.011	0.044	0.011	0.011	0.000	0.968
29	0.068	0.161	0.417	0.050	0.038	0.070	0.197	0.000	0.000	0.765
30	0.000	0.032	0.196	0.090	0.053	0.517	0.095	0.016	0.000	0.835
31	0.000	0.097	0.378	0.000	0.000	0.443	0.076	0.000	0.006	0.917
32	0.000	0.050	0.498	0.000	0.010	0.412	0.029	0.000	0.000	0.960
33	0.000	0.000	0.611	0.000	0.005	0.341	0.043	0.000	0.000	0.952
34	0.000	0.000	0.847	0.000	0.013	0.140	0.000	0.000	0.000	0.987
35	0.000	0.000	0.672	0.000	0.000	0.328	0.000	0.000	0.000	1.000
36	0.000	0.000	0.830	0.000	0.000	0.170	0.000	0.000	0.000	1.000
37	0.000	0.000	0.830	0.000	0.000	0.170	0.000	0.000	0.000	1.000
38	0.000	0.000	0.830	0.000	0.000	0.170	0.000	0.000	0.000	1.000
39	0.000	0.000	0.830	0.000	0.000	0.170	0.000	0.000	0.000	1.000
Total	0.058	0.083	0.422	0.030	0.017	0.329	0.056	0.004	0.001	0.921
22-24	0	0	0	0	0	0	0	0	0	0
25	9	4	3	0	0	1	0	0	0	17
26	449	224	131	0	0	61	4	0	0	865
27	363	147	239	51	4	0	24	9	0	800
28	472	571	731	183	23	93	22	23	0	2,049
29	94	224	580	69	52	97	275	0	0	1,064
30	0	151	915	420	250	2,414	444	75	0	3,900
31	0	421	1,646	0	0	1,928	332	0	28	3,995
32	0	247	2,439	(0)	51	2,020	143	0	0	4,706
33	0	0	1,475	0	13	824	103	0	0	2,299
34	0	0	848	0	13	140	0	0	0	988
35	0	0	337	0	0	165	0	0	0	502
36	0	0	687	0	0	141	0	0	0	828
37	0	0	46	0	0	10	0	0	0	56
38	0	0	60	0	0	12	0	0	0	72
39	0	0	3	0	0	1	0	0	0	4
Total	1,387	1,990	10,140	723	406	7,906	1,347	106	28	22,145

Appendix C. 7. Weekly coho salmon harvest in the traditional Alaskan District 111 and subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2011.

	D111			111-32
SW	Total	Hatchery	Wild	
25				
26	25	0	25	15
27	106	0	106	97
28	928	0	928	668
29	1,225	0	1,225	919
30	1,877	767	1,110	528
31	4,827	246	4,581	1,946
32	2,397	36	2,361	1,636
33	3,699	0	3,699	1,871
34	904	0	904	424
35	3,073	357	2,716	775
36	3,930	328	3,602	3,797
37	1,155	82	1,073	1,151
38	2,390	272	2,118	2,390
39	765	0	765	765
40	262	0	262	262
41				
Total	27,563	2,088	25,475	17,244

Appendix C. 8. Weekly coho salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2011.

	Above border	Harvest				Above border
SW	Run	Commercial	Aboriginal	Recreational	Test	Escapement
18						
19						
20						
21						
22						
23						
24						
25						
26		0				
27		1				
28		12				
29		63				
30		333				
31		463				
32	9,932	774				
33	13,611	707				
34	18,850	793			300	
35	28,063	877			400	
36	33,486	2,581			500	
37	43,322	326			295	
38	56,555	1,300			1,005	
39	62,580	156			600	
40		60			500	
41	77,504				402	
Before SW34		2,353				
SW34 to end		6,093				
Postseason Estimat	83,349	8,446	30	0	4,002	70,871

Appendix C. 9. Weekly effort in the Alaskan traditional District 111 and subdistrict 111–32 (Taku Inlet), commercial drift gillnet fishery, 2011.

		D111			D111-32		
SW	Start Date	Boats	Days Open	Boat Days	Boats	Days Open	Boat Days
25							
26	19-Jun	43	2.0	86	41	2	82
27	26-Jun	52	3.0	156	52	3	156
28	3-Jul	75	3.0	225	71	3	213
29	10-Jul	160	3.0	480	158	3	474
30	17-Jul	156	3.0	468	112	3	336
31	24-Jul	123	4.0	492	93	4	372
32	31-Jul	87	4.0	348	73	4	292
33	7-Aug	100	4.0	400	66	4	264
34	14-Aug	37	3.0	111	22	3	66
35	21-Aug	63	3.0	189	29	3	87
36	28-Aug	53	3.0	159	47	3	141
37	4-Sep	30	3.0	90	29	3	87
38	11-Sep	27	2.0	54	27	2	54
39	18-Sep	10	3.0	30	10	3	30
40	25-Sep	5	3.0	15	5	3	15
41				0			0
Total			46.0	3,303		46.0	2,669

Appendix C. 10. Weekly effort in the Canadian commercial and assessment fisheries in the Taku River, 2011.

		Commercial			Assessment/Test		
SW	Start Date	Average Permits	Days Fished	Permit Days	Average Permits	Days Fished	Permit Days
18	24-Apr	7.00	2.00	14.00			0.00
19	1-May	6.25	4.00	25.00			0.00
20	8-May	9.33	3.00	28.00			0.00
21	15-May	11.00	3.00	33.00			0.00
22	22-May				11.0	0.8	9.17
23	29-May				10.7	0.7	7.13
24	5-Jun				10.0	0.2	1.67
25	12-Jun				11.0	0.2	1.83
26	19-Jun	12.00	1.00	12.00			0.00
27	26-Jun	12.00	2.00	24.00			0.00
28	3-Jul	11.00	3.00	33.00			0.00
29	10-Jul	11.00	2.00	22.00			0.00
30	17-Jul	11.00	4.00	44.00			0.00
31	24-Jul	11.33	3.00	34.00			0.00
32	31-Jul	10.50	4.00	42.00			0.00
33	7-Aug	10.50	2.00	21.00			0.00
34	14-Aug	6.33	3.00	19.00		4	0.00
35	21-Aug	4.17	6.00	25.00		6	0.00
36	28-Aug	5.60	5.00	28.00		5	0.00
37	4-Sep	2.67	6.00	16.00		7	0.00
38	11-Sep	2.67	6.00	16.00		6	0.00
39	18-Sep	1.00	3.00	3.00		5	0.00
40	25-Sep	1.00	1.00	1.00		4	0.00
41	2-Oct					4	0.00
Total			63	440		43	20

Appendix C. 11. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2011.

	Tatsamenie		
		Cumulative	
Date	Count	Count	Percent
	Weir installed 7/26		
6-Aug	34	34	0.4
7-Aug	86	120	1.5
8-Aug	104	224	2.8
9-Aug	116	340	4.3
10-Aug	124	464	5.9
11-Aug	91	555	7.0
12-Aug	129	684	8.7
13-Aug	253	937	11.9
14-Aug	41	978	12.4
15-Aug	105	1,083	13.7
16-Aug	417	1,500	19.0
17-Aug	251	1,751	22.2
18-Aug	367	2,118	26.9
19-Aug	392	2,510	31.9
20-Aug	255	2,765	35.1
21-Aug	439	3,204	40.7
22-Aug	935	4,139	52.5
23-Aug	506	4,645	58.9
24-Aug	284	4,929	62.6
25-Aug	715	5,644	71.6
26-Aug	271	5,915	75.1
27-Aug	143	6,058	76.9
28-Aug	52	6,110	77.5
29-Aug	96	6,206	78.8
30-Aug	233	6,439	81.7
31-Aug	140	6,579	83.5
1-Sep	171	6,750	85.7
2-Sep	90	6,840	86.8
3-Sep	146	6,986	88.7
4-Sep	273	7,259	92.1
5-Sep	103	7,362	93.4
6-Sep	107	7,469	94.8
7-Sep	4	7,473	94.8
8-Sep	21	7,494	95.1
9-Sep	9	7,503	95.2
10-Sep	43	7,546	95.8
11-Sep	21	7,567	96.0
12-Sep	20	7,587	96.3
13-Sep	42	7,629	96.8
14-Sep	2	7,631	96.8
15-Sep	0	7,631	96.8
16-Sep	17	7,648	97.1
17-Sep	24	7,672	97.4
18-Sep	28	7,700	97.7
19-Sep	26	7,726	98.0
20-Sep	6	7,732	98.1
21-Sep	0	7,732	98.1
22-Sep	103	7,835	99.4
23-Sep	0	7,835	99.4
24-Sep	0	7,835	99.4
25-Sep	35	7,870	99.9
26-Sep	0	7,870	99.9
27-Sep	10	7,880	100.0
28-Sep		7,880	100.0
29-Sep	pulled		

	Total	Wild	TMR
Holding below weir			
Escapement to lake	7,880	6,019	1,861
Outlet spawners	<15		
otoltih samples	199	152	47
Broodstock [a]	-1,300	-993	-307
Spawners	6,580		

[a] Broodstock included 513 females and 410 males from which gametes were collected, 10 females and 15 male mortalities, and 277 females and 75 males which were held and released unspawned. The spawning success of the released fish is not known.

Appendix C. 12. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2011.

Date	Count[a]	Cumulative Count	Cumulative Percent
	Weir installed July 13		
23-Jul	0	0	0.0
24-Jul	0	0	0.0
25-Jul	0	0	0.0
26-Jul	5	5	0.1
27-Jul	3	8	0.2
28-Jul	17	25	0.7
29-Jul	50	75	2.0
30-Jul	240	315	8.3
31-Jul	46	361	9.5
1-Aug	774	1,135	29.8
2-Aug	496	1,631	42.8
3-Aug	432	2,063	54.2
4-Aug	268	2,331	61.2
5-Aug	430	2,761	72.5
6-Aug	382	3,143	82.5
7-Aug	221	3,364	88.3
8-Aug	102	3,466	91.0
9-Aug	123	3,589	94.2
10-Aug	58	3,647	95.7
11-Aug	32	3,679	96.6
12-Aug	22	3,701	97.2
13-Aug	9	3,710	97.4
14-Aug	1	3,711	97.4
15-Aug	0	3,711	97.4
16-Aug	8	3,719	97.6
17-Aug	6	3,725	97.8
18-Aug	4	3,729	97.9
19-Aug	6	3,735	98.1
20-Aug	2	3,737	98.1
21-Aug	10	3,747	98.4
22-Aug	12	3,759	98.7
23-Aug	2	3,761	98.7
24-Aug	15	3,776	99.1
25-Aug	16	3,792	99.6
26-Aug	0	3,792	99.6
27-Aug	2	3,794	99.6
28-Aug	2	3,796	99.7
29-Aug	5	3,801	99.8
30-Aug	2	3,803	99.8
31-Aug	0	3,803	99.8
1-Sep	1	3,804	99.9
2-Sep	0	3,804	99.9
3-Sep	2	3,806	99.9
4-Sep	2	3,808	100.0
5-Sep	0	3,808	100.0
6-Sep	1	3,809	100.0
7-Sep	Weir removed September 6		

	Total	Wild	TMR
Holding below weir			
Escapement to lake	3,809	3,248	561
Outlet spawners			
otoltih samples	0		
Broodstock a	0		
Spawners	3,809	3,248	561

Appendix C. 13. Daily counts of adult sockeye salmon passing through the King Salmon Lake weir, 2011.

		Cumulative	
Date	Count	Count	Percent
4-Jul			
5-Jul			
6-Jul	Weir installed July 7		
7-Jul	0	0	0.0
8-Jul	0	0	0.0
9-Jul	0	0	0.0
10-Jul	0	0	0.0
11-Jul	20	20	3.8
12-Jul	3	23	4.4
13-Jul	61	84	16.1
14-Jul	1	85	16.3
15-Jul	11	96	18.4
16-Jul	3	99	18.9
17-Jul	0	99	18.9
18-Jul	9	108	20.7
19-Jul	120	228	43.6
20-Jul	145	373	71.3
21-Jul	29	402	76.9
22-Jul	14	416	79.5
23-Jul	4	420	80.3
24-Jul	0	420	80.3
25-Jul	80	500	95.6
26-Jul	0	500	95.6
27-Jul	0	500	95.6
28-Jul	0	500	95.6
29-Jul	0	500	95.6
30-Jul	0	500	95.6
31-Jul	0	500	95.6
1-Aug	10	510	97.5
2-Aug	9	519	99.2
3-Aug	0	519	99.2
4-Aug	0	519	99.2
5-Aug	0	519	99.2
6-Aug	0	519	99.2
7-Aug	0	519	99.2
8-Aug	4	523	100.0
9-Aug	0	523	100.0
10-Aug	0	523	100.0
11-Aug	0	523	100.0
12-Aug	0	523	100.0
13-Aug	0	523	100.0
14-Aug	0	523	100.0
15-Aug	0	523	100.0
16-Aug	0	523	100.0
17-Aug	0	523	100.0
18-Aug	0	523	100.0
19-Aug	0	523	100.0
20-Aug	0	523	100.0
21-Aug	0	523	100.0
22-Aug	0	523	100.0
23-Aug	0	523	100.0
24-Aug	0	523	100.0
25-Aug	0	523	100.0
26-Aug	0	523	100.0
27-Aug	0	523	100.0
28-Aug	0	523	100.0
29-Aug	0	523	100.0
30-Aug	0	523	100.0
31-Aug	0	523	100.0
1-Sep	0	523	100.0
2-Sep	weir removed		
Total	523		

Helicopter survesy count 935--Sep 19

Expanded estimate 2,899

Appendix C. 14. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2011.

		Cumulative	
Date	Count	Count	Percent
4-Jul	weir installed		
5-Jul	0	0	0.0
6-Jul	0	0	0.0
7-Jul	0	0	0.0
8-Jul	15	15	1.8
9-Jul	5	20	2.5
10-Jul	0	20	2.5
11-Jul	10	30	3.7
12-Jul	0	30	3.7
13-Jul	4	34	4.2
14-Jul	6	40	4.9
15-Jul	15	55	6.8
16-Jul	0	55	6.8
17-Jul	0	55	6.8
18-Jul	18	73	9.0
19-Jul	0	73	9.0
20-Jul	158	231	28.5
21-Jul	170	401	49.4
22-Jul	75	476	58.7
23-Jul	0	476	58.7
24-Jul	0	476	58.7
25-Jul	0	476	58.7
26-Jul	0	476	58.7
27-Jul	0	476	58.7
28-Jul	0	476	58.7
29-Jul	40	516	63.6
30-Jul	30	546	67.3
31-Jul	20	566	69.8
1-Aug	0	566	69.8
2-Aug	20	586	72.3
3-Aug	0	586	72.3
4-Aug	0	586	72.3
5-Aug	0	586	72.3
6-Aug	0	586	72.3
7-Aug	0	586	72.3
8-Aug	10	596	73.5
9-Aug	26	622	76.7
10-Aug	0	622	76.7
11-Aug	0	622	76.7
12-Aug	0	622	76.7
13-Aug	0	622	76.7
14-Aug	0	622	76.7
15-Aug	0	622	76.7
16-Aug	0	622	76.7
17-Aug	0	622	76.7
18-Aug	43	665	82.0
19-Aug	0	665	82.0
20-Aug	20	685	84.5
21-Aug	75	760	93.7
22-Aug	33	793	97.8
23-Aug	0	793	97.8
24-Aug	0	793	97.8
25-Aug	0	793	97.8
26-Aug	0	793	97.8
27-Aug	0	793	97.8
28-Aug	18	811	100.0
29-Aug	0	811	100.0
30-Aug	0	811	100.0
31-Aug	0	811	100.0
Total count		811	
Harvest above weir		0	
Escapement		811	

19-Sept Helicopter survey was 482

Appendix C. 15. Daily counts of large Chinook salmon carcasses at the Nakina River weir, 2011.

	Count (all sizes)				Cumulative Count		Size (sex combined)		
Date	Female	Male	Unknown	Combined	Count	Percent	Large	nonlarge	unknown
31-Jul	1	0	0	1	1	0.1	1	0	0
1-Aug	0	1	0	1	2	0.2	1	0	0
2-Aug	0	1	0	1	3	0.3	0	1	0
3-Aug	0	1	0	1	4	0.4	1	0	0
4-Aug	3	0	0	3	7	0.7	3	0	0
5-Aug	0	2	0	2	9	0.9	2	0	0
6-Aug	2	10	4	16	25	2.5	14	2	0
7-Aug	4	10	1	15	40	3.9	11	4	0
8-Aug	5	12	0	17	57	5.6	10	7	0
9-Aug	1	23	1	25	82	8.0	14	11	0
10-Aug	8	36	0	44	126	12.4	22	22	0
11-Aug	17	62	1	80	206	20.2	46	34	0
12-Aug	7	58	2	67	273	26.8	28	39	0
13-Aug	14	89	0	103	376	36.9	39	64	0
14-Aug	20	84	1	105	481	47.2	51	54	0
15-Aug	20	87	0	107	588	57.6	42	65	0
16-Aug	24	112	0	136	724	71.0	45	91	0
17-Aug	27	127	0	154	878	86.1	47	107	0
18-Aug	10	71	0	81	959	94.0	19	62	0
19-Aug	2	39	0	41	1,000	98.0	6	35	0
20-Aug	3	10	0	13	1,013	99.3	7	6	0
21-Aug	3	4	0	7	1,020	100.0	4	3	0
Total	171	839	10	1,020			413	607	0

Appendix D. 1. All historic harvest and effort of salmon in the D111 gillnet fishery, 1960–2011.

These estimates include traditional and common property terminal harvest in D11.

Year	Chinook	Sockeye	Coho	Pink	Chum	Boat Days	Days open
1960	8,810	42,819	22,374	33,155	41,852		60
1961	7,434	45,981	15,486	41,455	24,433		62
1962	5,931	36,745	15,661	17,280	20,635		52
1963	2,652	24,119	10,855	21,692	20,114		54
1964	2,509	34,140	29,315	26,593	12,853		56
1965	4,170	27,569	32,667	2,768	11,533		63
1966	4,829	33,925	26,065	23,833	35,133		64
1967	5,417	17,735	40,391	12,372	22,834		53
1968	4,904	19,501	39,103	67,365	21,890		60
1969	6,986	41,222	10,802	74,178	15,046	1,518	42
1970	3,357	50,862	44,569	196,237	110,621	2,688	53
1971	6,945	66,261	41,588	31,296	90,964	3,053	55
1972	10,949	80,911	49,609	144,237	148,432	3,103	51
1973	9,799	85,402	35,453	58,186	109,245	3,286	41
1974	2,908	38,726	38,667	57,820	86,692	2,315	30
1975	2,182	32,550	1,185	9,567	2,678	1,084	16
1976	1,757	62,174	41,664	14,977	81,972	1,914	25
1977	1,068	72,030	54,929	88,904	60,964	2,258	27
1978	1,926	55,398	31,944	51,385	36,254	2,174	26
1979	3,701	122,148	16,194	152,836	61,194	2,269	29
1979	2,251	123,451	41,677	296,622	192,793	4,123	31
1981	1,721	49,942	26,711	254,856	76,438	2,687	30
1982	3,014	83,722	29,073	109,270	37,584	2,433	36
1983	888	31,821	21,455	66,239	15,264	1,274	33
1984	1,773	77,233	33,836	145,971	86,764	2,757	53
1985	2,632	88,093	55,518	311,305	106,900	3,264	48
1986	2,584	73,061	30,512	16,568	58,792	2,129	33
1987	2,076	75,212	35,219	363,439	121,660	2,514	35
1988	1,777	38,901	44,818	157,732	140,038	2,135	32
1989	1,811	74,019	51,812	180,639	36,979	2,333	41
1990	3,480	126,884	67,530	153,126	145,799	3,188	38
1991	3,214	109,471	126,576	74,170	160,422	4,145	57
1992	2,341	135,411	172,662	314,445		4,550	50
1993	7,159	171,427	65,539	29,216	167,902	3,827	43
1994	5,047	106,318	188,682	410,467	214,243	5,078	66
1995	4,660	104,064	83,609	41,513	350,033	4,034	49
1996	2,659	201,853	33,650	12,675	365,813	3,229	46
1997	2,805	143,009	32,364	51,483	176,913	2,107	33
1998	794	101,702	28,713	168,738	296,121	3,070	48
1999	1,961	93,368	17,309	59,368	429,405	2,841	59
2000	2,019	290,165	7,828	58,699	669,998	2,919	40
2001	1,698	293,657	22,646	123,026	241,370	4,731	54
2002	1,850	240,439	40,464	78,624	231,936	4,095	62
2003	1,467	313,725	24,338	114,184	170,901	3,977	78
2004	2,345	428,745	59,868	154,775	131,856	3,342	63
2005	23,301	222,156	21,289	182,778	97,588	3,427	68
2006	11,261	313,982	60,145	192,140	383,000	3,517	89
2007	1,452	184,810	22,394	100,375	590,169	3,505	64
2008	2,193	116,693	37,349	90,162	774,095	3,116	49
2009	6,800	62,070	36,615	56,801	918,350	3,438	62
2010	1,685	76,607	62,241	132,785	488,898	2,831	54
2011	2,510	163,896	28,574	344,766	667,929	3,480	46
average							
60-10	4,097	108,671	42,764	110,359	177,867	3,007	48
01-10	5,405	225,288	38,735	122,565	402,816	3,598	64

Appendix D. 2. Annual harvest estimates of Taku River large Chinook salmon in the D111 fisheries, 2005–2011.

Year	PU	Sport	Gillnet	Troll	Total large Taku
2005	32	2,476	16,490	21	19,019
2006	18	2,048	9,257	11	11,334
2007	22	1,034	303	0	1,359
2008	46	632	445	0	1,123
2009	25	673	4,609	2	5,309
2010	36	984	526	0	1,546
2011	48	573	518	0	1,139

Appendix D. 3. Annual Chinook salmon harvest in the Canadian fisheries in the Taku River, 1979–2011.

	Commerical		Aboriginal		Test			Rec	Total
Year	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	released large	Large	All Large
1979	97							300	397
1980	225		85					300	610
1981	159							300	459
1982	54							300	354
1983	156	400	9					300	465
1984	294	221	0					300	594
1985	326	24	4					300	630
1986	275	77	10					300	585
1987	127	106	0					300	427
1988	555	186	27		72			300	954
1989	895	139	6		31			300	1,232
1990	1,258	128	0		48			300	1,606
1991	1,177	432	0		0			300	1,477
1992	1,445	147	121		0			300	1,866
1993	1,619	171	25		0			300	1,944
1994	2,065	235	119		There was no Canadian coho test fishery			300	2,484
1995	1,577	298	70		There was no Canadian coho test fishery			105	1,752
1996	3,331	144	63		There was no Canadian coho test fishery			105	3,499
1997	2,731	84	103					105	2,939
1998	1,107	227	60		There was no Canadian coho test fishery			105	1,272
1999	908	257	50		577	2	181	105	1,640
2000	1,576	87	50		1,312	87	439	105	3,043
2001	1,458	118	125		1,175	229	871	105	2,863
2002	1,561	291	37		1,311	355	1,132	105	3,014
2003	1,894	547	277	237	1,403	397		105	3,679
2004	2,082	335	277	116	1,489	294		105	3,953
2005	7,399	821	212		0	0		105	7,716
2006	7,377	207	222		630	9		105	8,334
2007	874	426	167	16	1,396	302		105	2,542
2008	913	330	1		1,399	139		105	2,418
2009	6,759	1,137	172	0	0	0		105	7,036
2010	5,238	700	126	0	0	0		105	5,469
2011	2,342	514	150	21	680	134		105	3,277
Averages									
85-10	2,174	294	89	74				180	2,861
01-10	3,556	491	162	74	880	173		105	4,702

Appendix D. 4. Taku River large Chinook salmon run size, 1979–2011.

Run estimate does not include spawning escapements below the U.S./Canada border. US harvest estimates after 2004 are based on GSI (gillnet and sport fish) and CWT (troll) and harvest in the fisheries between SW 18-28.

	Above Border M-R					Above Border		
	Spawning		CI		Canadian	Run	U.S.	Terminal
Year	Escapement	Method	Lower	Upper	Harvest [a]	Estimate	Harvest	Run
1989	40,329	Mark-recapture	29,263	51,395	1,232	41,561		
1990	52,142	Mark-recapture	33,863	70,421	1,606	53,748		
1991	51,645	Aerial expansion	17,072	86,218	1,477	53,122		
1992	55,889	Aerial expansion	18,475	93,303	1,866	57,755		
1993	66,125	Aerial expansion	21,858	110,392	1,944	68,069		
1994	48,368	Aerial expansion	15,989	80,747	2,484	50,852		
1995	33,805	Medium expansion	23,887	43,723	1,752	35,557	6,263	41,820
1996	79,019	Mark-recapture	61,285	96,753	3,499	82,518	6,280	88,798
1997	114,938	Mark-recapture	79,878	149,998	2,939	117,877	8,325	126,202
1998	31,039	Aerial expansion	10,255	51,823	1,272	32,311	2,605	34,916
1999	16,786	Mark-recapture	10,571	23,001	1,640	18,426	4,019	22,445
2000	34,997	Mark-recapture	24,407	45,587	3,043	38,040	3,472	41,512
2001	46,644	Mark-recapture	33,383	59,905	2,863	49,507	3,883	53,390
2002	55,044	Mark-recapture	33,313	76,775	3,014	58,058	3,282	61,340
2003	36,435	Mark-recapture	23,293	49,577	3,679	40,114	2,768	42,882
2004	75,032	Mark-recapture	54,883	95,181	3,953	78,985	3,696	82,681
2005	38,599	Mark-recapture	28,980	48,219	7,716	46,315	19,019	65,334
2006	42,191	Mark-recapture	31,343	53,040	8,334	50,525	11,334	61,859
2007	14,749	Mark-recapture	8,326	21,172	2,542	17,291	1,359	18,650
2008	26,645	Mark-recapture	20,744	32,545	2,418	29,063	1,123	30,186
2009	22,761	Mark-recapture	17,134	28,388	7,036	29,797	5,309	35,106
2010	28,769	Mark-recapture	23,840	33,698	5,469	34,238	1,546	35,784
2011	27,523	Medium expansion	19,411	35,635	3,277	30,800	1,139	31,939
Averages								
95-10	43,591				3,823	47,414	5,268	52,682
01-10	38,687				4,702	43,389	5,332	48,721

[a] In years when sample size data is available (1999-present in the commercial and test fisheries, and 2003-2004 in the Aboriginal fishery) it was used to determine the number of large fish in the Canadian harvest. In years when sample data is not available, the average % large in the commercial fishery from 1999-2004 (75%) was applied to all harvest except the recreational harvest which is assumed to be 100% large.

Appendix D. 5. Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975–2011.

Year	Kowatua	Tatsatua	Dudidontu	Tseta	Nakina	Nahlin	Total Index Count without Tseta
1975			15		1,800	274	2,089
1976	341	620	40		3,000	725	4,726
1977	580	573	18		3,850	650	5,671
1978	490	550		21	1,620	624	3,284
1979	430	750	9		2,110	857	4,156
1980	450	905	158		4,500	1,531	7,544
1981	560	839	74	258	5,110	2,945	9,528
1982	289	387	130	228	2,533	1,246	4,585
1983	171	236	117	179	968	391	1,883
1984 [ab]	279	616		176	1,887	951	3,733
1985	699	848	475	303	2,647	2,236	6,905
1986	548	886	413	193	3,868	1,612	7,327
1987	570	678	287	180	2,906	1,122	5,563
1988	1,010	1,272	243	66	4,500	1,535	8,560
1989	601	1,228	204	494	5,141	1,812	8,986
1990	614	1,068	820	172	7,917	1,658	12,077
1991	570	1,164	804	224	5,610	1,781	9,929
1992	782	1,624	768	313	5,750	1,821	10,745
1993	1,584	1,491	1,020	491	6,490	2,128	12,713
1994	410	1,106	573	614	4,792	2,418	9,299
1995	550	678	731	786	3,943	2,069	7,971
1996	1,620	2,011	1,810	1,201	7,720	5,415	18,576
1997	1,360	1,148	943	648	6,095	3,655	13,201
1998	473	675	807	360	2,720	1,294	5,969
1999	561	431	527	221	1,900	532	3,951
2000	702	953	482	160	2,907	728	5,772
2001	1,050	1,024	479	202	1,552	935	5,040
2002	945	1,145	834	192	4,066	1,099	8,089
2003	850	1,000	644	436	2,126	861	5,481
2004	828	1,396	1,036	906	4,091	1,787	9,138
2005	833	1,146	318	215	1,213	471	3,981
2006	1,180	908	395	199	1,900	955	5,338
2007	262	390	4	199	NA	277	933
2008	690	1,083	480	497	1,437	1,121	4,811
2009	408	633	272	145	1,698	1,033	4,044
2010	716	821	561	128	1,730	1,018	4,846
2011	377	917	301	128	1,380	808	3,783
Averages							
85-10	766	1,016	613	360	3,716	1,568	7,518
01-10	776	955	502	312	2,201	956	5,170

[a] Partial survey. Tseta 84

[b] Extrapolated results. Nahlin 84

[c] Stopped flying index area 4 on the Nakina after 2009.

Appendix D. 6. Annual sockeye salmon harvest in the Alaskan District 111 fisheries, includes estimates of Taku wild and enhanced fish in the gillnet, seine, and personal use fisheries, 1967–2011.

Personal Use wild/enhanced estimates are based on the Canadian lower river commerical fishery.

	D111 gillnet harvest				PU Taku harvest		
	All	D11 without snet for stock comp					
Year	D111	harvest	Wild Taku	EnhancedTaku	All Taku	Wild Taku	EnhancedTaku
1967	17,735	15,282			103		
1968	19,501	17,721			41		
1969	41,169	40,053			122		
1970	50,922	49,951			304		
1971	66,181	62,593			512		
1972	80,404	76,478			554		
1973	85,317	81,149			1,227		
1974	38,670	33,934			1,431		
1975	32,513	32,271			170		
1976	61,749	54,456			351		
1977	70,097	66,844					
1978	55,398	54,305					
1979	122,148	115,192					
1980	123,451	116,861					
1981	49,942	48,912					
1982	83,625	80,161					
1983	31,821	31,073					
1984	77,233	76,015					
1985	88,077	87,550			920		
1986	73,061	72,713					
1987	75,212	76,377					
1988	38,923	38,885					
1989	74,019	73,991			562		
1990	126,884	126,876			793		
1991	109,877	111,002			800		
1992	135,411	132,669			1,217		
1993	171,556	171,373			1,201		
1994	105,861	105,758			1,111		
1995	103,377	103,361	86,929	4,065	990	950	40
1996	199,014	198,303	181,776	4,762	1,189	1,168	21
1997	94,745	94,486	76,043	2,031	1,053	1,024	29
1998	69,677	68,462	47,824	806	1,202	1,165	37
1999	79,425	77,515	61,205	599	1,254	1,236	18
2000	168,272	166,248	128,567	1,561	1,134	1,116	18
2001	290,450	284,786	194,091	8,880	1,462	1,405	57
2002	178,488	176,042	114,461	651	1,289	1,287	2
2003	205,433	177,903	133,509	767	1,218	1,208	10
2004	241,254	177,830	75,186	676	1,150	1,135	15
2005	87,254	71,472	44,361	579	1,150	1,136	14
2006	134,781	99,622	62,814	2,210	804	773	31
2007	112,241	107,129	60,879	3,684	566	508	58
2008	116,693	116,693	63,002	11,680	1,010	903	107
2009	62,070	62,070	35,121	240	871	863	8
2010	61,947	61,947	44,837	910	1,020	987	33
2011	163,896	100,049	65,089	5,604	1,111	1,024	87
Averages							
95-10	137,820	127,742	88,163	2,756	1,085	1,054	31
01-10	149,061	133,549	82,826	3,028	1,054	1,020	34

Appendix D. 7. Stock proportions and harvest of sockeye salmon in the traditional Alaska District 111 commercial drift gillnet fishery, 1983–2011.

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include harvest inside Port Snettisham

		King		Little Trapper		Tatsamenie		Taku	Total	Snettisham Total Wild			U.S.	Stikine
Week	Kuthai	Salmon	Mainstem	Wild	Enhanced	Wild	Enhanced	Wild	Taku	Crescent	Speel	Snett.	Enhanced	Enhanced
1983								0.755	0.755			0.245		
1984								0.758	0.758			0.242		
1985								0.838	0.838			0.162		
1986	0.061		0.303	0.266		0.204		0.834	0.834	0.090	0.076	0.166		
1987	0.078		0.376	0.234		0.031		0.720	0.720	0.157	0.123	0.280		
1988	0.118		0.305	0.158		0.082		0.663	0.663	0.266	0.071	0.337		
1989[b]	0.077					0.156		0.849	0.849	0.051	0.100	0.152		
1990	0.036		0.336	0.197		0.286		0.855	0.855	0.112	0.033	0.145		
1991	0.039		0.373	0.297		0.232		0.941	0.941	0.059	0.000	0.059		
1992	0.048		0.445	0.220		0.191		0.904	0.904	0.036	0.060	0.096		
1993	0.062		0.308	0.328		0.123		0.822	0.822	0.069	0.109	0.178		
1994	0.110		0.361	0.356		0.091		0.917	0.917	0.036	0.022	0.058	0.025	
1995	0.046		0.428	0.214	0.010	0.153	0.029	0.841	0.880	0.018	0.075	0.093	0.026	
1996	0.069		0.499	0.117	0.010	0.232	0.014	0.917	0.941	0.013	0.032	0.045	0.014	
1997	0.067		0.282	0.170	0.011	0.286	0.011	0.805	0.826	0.027	0.026	0.053	0.120	
1998	0.087		0.209	0.158	0.008	0.245	0.004	0.699	0.710	0.026	0.007	0.033	0.257	
1999	0.176		0.235	0.259	0.003	0.119	0.005	0.790	0.797	0.049	0.023	0.072	0.131	
2000	0.139		0.211	0.273	0.002	0.151	0.008	0.773	0.783	0.004	0.054	0.058	0.160	
2001	0.076		0.268	0.130	0.000	0.207	0.031	0.682	0.713	0.014	0.032	0.046	0.241	
2002	0.098		0.173	0.254	0.000	0.126	0.004	0.650	0.654	0.014	0.032	0.047	0.299	
2003	0.087	0.016	0.398	0.225	0.000	0.033	0.004	0.750	0.755	0.009	0.047	0.056	0.181	
2004	0.064	0.043	0.233	0.041	0.000	0.042	0.004	0.423	0.427	0.011	0.040	0.051	0.522	
2005	0.021	0.024	0.456	0.080	0.000	0.040	0.008	0.621	0.629	0.048	0.097	0.145	0.226	
2006	0.019	0.025	0.361	0.067	0.000	0.159	0.022	0.631	0.653	0.015	0.044	0.060	0.288	
2007	0.066	0.000	0.355	0.058	0.000	0.089	0.034	0.568	0.603	0.083	0.023	0.106	0.291	
2008	0.092	0.011	0.267	0.016	0.000	0.154	0.100	0.540	0.640	0.034	0.048	0.082	0.278	
2009	0.026	0.000	0.343	0.087	0.000	0.109	0.004	0.566	0.570	0.051	0.088	0.140	0.288	0.002
2010	0.038	0.007	0.523	0.000	0.002	0.155	0.012	0.724	0.738	0.031	0.120	0.151	0.109	0.001
2011	0.025	0.037	0.397	0.055	0.016	0.135	0.040	0.651	0.707	0.018	0.027	0.045	0.246	0.003
Averages														
86-10	0.072		0.335	0.175	0.003	0.148	0.018	0.739	0.753	0.053	0.055	0.108	0.203	
01-10	0.059	0.016	0.338	0.096	0.000	0.111	0.022	0.615	0.638	0.031	0.057	0.088	0.272	0.002
1983								23,460	23,460			7,613		
1984								57,619	57,619			18,396		
1985								73,367	73,367			14,183		
1986	4,468		21,999	19,348		14,829		60,644	60,644	6,579	5,490	12,069		
1987	5,984		28,724	17,867		2,388		54,963	54,963	11,997	9,417	21,414		
1988	4,594		11,854	6,147		3,191		25,785	25,785	10,355	2,745	13,100		
1989[b]	5,694					11,532		62,804	62,804	3,788	7,422	11,210		
1990	4,539		42,673	24,950		36,330		108,492	108,492	14,241	4,143	18,384		
1991	4,339		41,376	33,020		25,736		104,471	104,471	6,531	0	6,531		
1992	6,411		59,004	29,214		25,329		119,959	119,959	4,813	7,897	12,709		
1993	10,662		52,820	56,290		21,116		140,888	140,888	11,864	18,621	30,485		
1994	11,627		38,142	37,607		9,576		96,952	96,952	3,855	2,317	6,172	2,634	
1995	4,787		44,271	22,106	1,017	15,765	3,049	86,929	90,994	1,901	7,740	9,641	2,727	
1996	13,693		98,876	23,224	1,913	45,983	2,849	181,776	186,538	2,535	6,393	8,928	2,838	
1997	6,328		26,621	16,061	1,028	27,033	1,003	76,043	78,074	2,551	2,503	5,054	11,358	
1998	5,949		14,306	10,826	560	16,743	246	47,824	48,630	1,753	491	2,244	17,588	
1999	13,679		18,231	20,101	241	9,194	358	61,205	61,804	3,786	1,770	5,556	10,155	
2000	23,076		35,025	45,424	276	25,042	1,285	128,567	130,128	614	8,979	9,592	26,528	
2001	21,612		76,418	37,124	0	58,937	8,880	194,091	202,971	4,017	9,149	13,166	68,649	
2002	17,235		30,397	44,687	0	22,141	651	114,461	115,112	2,524	5,700	8,224	52,708	
2003	15,462	2,829	70,801	39,989	0	5,876	767	133,509	134,276	1,622	8,361	9,983	32,196	
2004	11,420	7,583	41,366	7,311	0	7,505	676	75,186	75,862	2,029	7,128	9,157	92,810	
2005	1,495	1,715	32,591	5,699	0	2,860	579	44,361	44,940	3,418	6,953	10,371	16,161	
2006	1,863	2,441	35,993	6,691	0	15,825	2,210	62,814	65,024	1,531	4,409	5,940	28,659	
2007	7,087	0	38,084	6,224	0	9,484	3,684	60,879	64,563	8,878	2,475	11,353	31,213	
2008	10,709	1,308	31,170	1,816	0	17,999	11,680	63,002	74,682	3,939	5,605	9,544	32,467	
2009	1,636	0	21,275	5,414	0	6,796	240	35,121	35,361	3,182	5,492	8,674	17,888	148
2010	2,381	452	32,407		150	9,597	760	44,837	45,747	1,940	7,422	9,362	6,759	79
2011	2,538	3,714	39,743	5,548	1,557	13,548	4,047	65,089	70,693	1,752	2,721	4,473	24,595	288
Average[a]														
86-10	8,669		39,351	22,484		17,872		87,422	89,187	4,810	5,945	10,755	26,667	
01-10	9,090	2,041	41,050	17,217	15	15,702	3,013	82,826	85,854	3,308	6,269	9,577	37,951	

Appendix D. 8. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet harvest by week, 1983–2011.

Data based proportions which is used in the model and in preliminary stock comp of brain parasites. Does not include enhanced fish.

			Week							
Year			27	28	29	30	31	32	33	34	Total
1983		0.996	0.842	0.819	0.663	0.527	0.836	0.534	0.719	0.759	0.755
1984	0.970	0.956	0.843	0.670	0.588	0.712	0.728	0.809	0.726		0.758
1985	0.999	0.986	0.928	0.974	0.868	0.706	0.737	0.826	0.801		0.838
1986	0.938	0.953	0.873	0.880	0.852	0.777	0.851	0.757	0.893	0.739	0.834
1987		0.982	0.901	0.884	0.948	0.414	0.619	0.689	0.841	0.731	0.720
1988		0.964	0.886	0.889	0.510	0.643	0.677	0.528	0.478	0.346	0.663
1989	0.943	0.989	0.979	0.852	0.835	0.641	0.681	0.919	0.676		0.848
1990	0.874	0.935	0.904	0.773	0.782	0.863	0.943	0.939	0.878	0.862	0.855
1991	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1992		0.978	0.985	0.956	0.916	0.943	0.893	0.858	0.766	0.766	0.904
1993		0.961	0.901	0.837	0.856	0.781	0.790	0.829	0.738	0.706	0.822
1994		1.000	0.981	0.973	0.967	0.870	0.835	0.938	0.804	0.901	0.917
1995	0.942	0.889	0.903	0.858	0.872	0.868	0.761	0.759	0.705	0.740	0.841
1996	1.000	0.998	0.909	0.974	0.950	0.991	0.914	0.945	0.879	0.804	0.953
1997	0.992	0.970	0.910	0.926	0.951	0.939	0.939	0.925	0.872	0.906	0.938
1998		0.964	0.974	0.978	0.971	0.949	0.948	0.942	0.997	0.857	0.955
1999		0.966	0.988	0.953	0.934	0.917	0.878	0.833	0.732	0.665	0.917
2000		0.973	0.962	0.958	0.929	0.898	0.872	0.907	0.908	0.858	0.931
2001	0.995	0.998	0.948	0.888	0.908	0.930	0.961	0.945	0.858	0.858	0.936
2002	0.986	0.989	0.993	0.970	0.872	0.946	0.829	0.880	0.851	0.851	0.933
2003	1.000	0.987	0.961	0.994	0.970	0.929	0.883	0.795	0.236	0.236	0.931
2004		0.968	0.950	0.930	0.939	0.884	0.731	0.799	0.909	0.891	0.891
2005	0.973	0.973	0.953	0.947	0.932	0.924	0.881	0.885	0.786	0.767	0.905
2006	0.957	0.957	0.912	0.856	0.896	0.819	0.802	0.842	0.970	0.970	0.914
2007	1.000	0.992	0.934	0.807	0.716	0.821	0.879	0.824	0.812	0.786	0.925
2008	0.975	0.900	0.695	0.632	0.589	0.470	0.424	0.488	0.489	0.489	0.868
2009	0.902	0.902	0.715	0.683	0.552	0.542	0.528	0.416	0.382	0.382	0.566
2010		0.964	0.955	0.960	0.737	0.637	0.754	0.636	0.529	0.764	0.723
2011		0.988	0.943	0.797	0.766	0.699	0.683	0.606	0.365	0.228	0.651
Average											
83-10		0.967	0.916	0.886	0.838	0.796	0.804	0.798	0.754	0.740	0.857
01-10		0.963	0.902	0.867	0.811	0.790	0.767	0.751	0.682	0.700	0.859

Appendix D. 9. Annual sockeye salmon harvest estimates of wild and enhanced fish in the Canadian fisheries in the Taku River, 1979–2011.

	All harvest					Wild Taku			EnhancedTaku		
	Commercial										
Year	All harvest	Taku	Aborginal	Test	test released	Commercial	Aboriginal	Test	Commercial	Aboriginal	Test
1979	13,578					13,578					
1980	22,602		150			22,602	150				
1981	10,922					10,922					
1982	3,144					3,144					
1983	17,056		0			17,056	0				
1984	27,242		50			27,242	50				
1985	14,244		167			14,244	167				
1986	14,739		200			14,739	200				
1987	13,554		96	237		13,554	96	237			
1988	12,014		245	708		12,014	245	708			
1989	18,545		53	207		18,545	53	207			
1990	21,100		89	285		21,100	89	285			
1991	25,067		150	163		25,067	150	163			
1992	29,472		352	38		29,472	352	38			
1993	33,217		140	166		33,217	140	166			
1994	28,762		239			28,762	239				
1995	32,640		71			31,306	68		1,334	3	0
1996	41,665		360			40,933	354		732	6	0
1997	24,003		349		1	23,346	339		657	10	0
1998	19,038		239			18,449	232		589	7	0
1999	20,681		382	88		20,384	377	87	297	5	1
2000	28,009		140	319		27,573	138	314	436	2	5
2001	47,660		210	247	82	45,792	202	237	1,868	8	10
2002	31,053		155	518	161	31,004	155	517	49	0	1
2003	32,730		267	27	197	32,463	265	27	267	2	0
2004	20,148		120	91		19,882	118	90	266	2	1
2005	21,697		161	244		21,440	159	241	257	2	3
2006	21,099		85	262		20,294	82	252	805	3	10
2007	16,714		159	376		14,987	143	337	1,727	16	39
2008	19,284		215	10	32	17,242	192	9	2,042	23	1
2009	10,980		106	174		10,875	105	172	105	1	2
2010	20,211	20,180	184	297		19,555	178	287	625	6	10
2011	24,032	23,898	124	521		22,145	114	480	1,753	10	41
Averages											
86-10	24,163		191			23,680	187				
01-10	24,158		166	225		23,353	160	217	801	6	8

Appendix D. 10. Annual sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery on the Taku River, 1986–2011.

Data based on scale pattern, brain parasite, and thermal mark analyses.

		King		Little Trapper		Tatsamenie		Taku		Stikine	US
Year	Kuthai	Salmon	Mainstem[a]	Wild	Enhance	Wild	Enhance	Wild	Enhance	Enhance	Enhance
1986	0.111		0.350	0.397		0.143		1.000			
1987	0.062		0.649	0.201		0.088		1.000			
1988	0.143		0.343	0.417		0.098		1.000			
1989[a]	0.053					0.203		1.000			
1990	0.112		0.338	0.388		0.163		1.000			
1991	0.064		0.452	0.308		0.176		1.000			
1992	0.092		0.569	0.240		0.099		1.000			
1993	0.126		0.432	0.392		0.049		1.000			
1994	0.158		0.302	0.482		0.058		1.000			
1995	0.047		0.373	0.427	0.010	0.112	0.031	0.959	0.041		
1996	0.105		0.442	0.221	0.008	0.215	0.010	0.982	0.018		
1997	0.120		0.277	0.282	0.019	0.294	0.008	0.973	0.027		
1998	0.225		0.254	0.207	0.028	0.283	0.003	0.969	0.031		
1999	0.389		0.145	0.305	0.008	0.147	0.006	0.986	0.014		
2000	0.172		0.326	0.205	0.000	0.282	0.016	0.984	0.016		
2001	0.184		0.364	0.168	0.000	0.246	0.039	0.961	0.039		
2002	0.316		0.192	0.428	0.000	0.062	0.002	0.998	0.002		
2003	0.231	0.023	0.271	0.378	0.000	0.089	0.008	0.992	0.008		
2004	0.168	0.071	0.586	0.132	0.000	0.031	0.013	0.987	0.013		
2005	0.098	0.038	0.505	0.204	0.000	0.143	0.012	0.988	0.012		
2006	0.055	0.028	0.474	0.176	0.000	0.229	0.038	0.962	0.038		
2007	0.102	0.000	0.524	0.101	0.000	0.170	0.096	0.897	0.096	0.007	
2008	0.308	0.007	0.222	0.058	0.000	0.299	0.099	0.894	0.099	0.007	
2009	0.155	0.000	0.276	0.414	0.000	0.145	0.007	0.990	0.007	0.002	
2010	0.162	0.033	0.605		0.014	0.167	0.017	0.968	0.031	0.002	
2011	0.058	0.083	0.422	0.030	0.017	0.329	0.056	0.921	0.073	0.004	0.001
Averages											
86-10	0.150		0.386	0.284		0.160		0.980			
01-10	0.178	0.025	0.402	0.229	0.001	0.158	0.033	0.964	0.034	0.005	
1986	1,629		5,152	5,855		2,103		14,739			
1987	834		8,793	2,728		1,199		13,554			
1988	1,715		4,122	5,005		1,172		12,014			
1989[a]	990					3,763		18,545			
1990	2,355		7,131	8,183		3,431		21,100			
1991	1,601		11,327	7,721		4,418		25,067			
1992	2,699		16,764	7,085		2,924		29,472			
1993	4,192		14,347	13,036		1,641		33,217			
1994	4,544		8,684	13,858		1,676		28,762	0		
1995	1,528		12,185	13,934	331	3,659	1,003	31,306	1,334		
1996	4,357		18,422	9,195	331	8,959	401	40,933	732		
1997	2,891		6,637	6,758	456	7,060	201	23,346	657		
1998	4,279		4,829	3,944	533	5,397	56	18,449	589		
1999	8,044		2,992	6,314	171	3,034	126	20,384	297		
2000	4,809		9,122	5,745	0	7,897	436	27,573	436		
2001	8,748		17,330	8,005	0	11,709	1,868	45,792	1,868		
2002	9,826		5,948	13,305	0	1,925	49	31,004	49		
2003	7,568	755	8,855	12,383	0	2,902	267	32,463	267		
2004	3,381	1,430	11,799	2,653	0	620	266	19,882	266		
2005	2,120	829	10,950	4,433	0	3,108	257	21,440	257		
2006	1,168	589	9,993	3,704	0	4,840	805	20,294	805		
2007	1,697	0	8,759	1,694	0	2,838	1,602	14,987	1,602	125	
2008	5,949	139	4,276	1,114	0	5,763	1,905	17,242	1,905	137	
2009	1,703	0	3,035	4,549	0	1,588	80	10,875	80	25	
2010	3,274	676	12,235		290	3,369	334	19,555	625	31	
2011	1,387	1,990	10,140	723	406	7,906	1,347	22,145	1,753	106	28
Averages											
86-10	3,788		9,320	7,009		3,885		23,894	692		
01-10	4,543	552	9,318	5,760	29	3,866	743	23,353	772		

[a] The Trapper and Mainstem groups were combined in the 1989 and 2010 analyses.

Appendix D. 11. Annual sockeye salmon weir counts, escapements, and samples at the Tatsamenie weir, 1984–2011.

Ototlith samples are a proportion of the broodstock samples.

					Broodstock					
	Weir	Actual	Spawning Escapement		otolith samples			broodstock taken		
Year	Count	Spawners	wild	enhanced	wild	enhanced	All samples	wild	enhanced	Total
1984										
1985[a]										
1986										
1987[a]		25								
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995	5,780	4,387	3,443	944				1,093	300	1,393
1996	10,381	8,026	7,682	344				2,254	101	2,355
1997	8,363	5,981	5,815	166				2,316	66	2,382
1998	5,997	4,735	4,628	107	389	9	398	1,233	29	1,262
1999	2,104	1,888	1,855	33	167	3	170	212	4	216
2000	7,575	5,570	4,835	735	342	52	394	1,740	265	2,005
2001	22,575	19,579	16,324	3,255	336	67	403	2,498	498	2,996
2002	**5,495**	**4,379**	3,854	525	345	47	392	982	134	1,116
2003	4,515	2,965	2,085	880	256	108	364	1,090	460	1,550
2004	1,951	1,357	860	497	220	127	347	377	217	594
2005	3,372	2,445	1,960	485	311	77	388	743	184	927
2006	22,475	19,820	17,623	2,197	369	46	415	2,361	294	2,655
2007	11,187	8,384	6,082	2,302	140	53	193	2,033	770	2,803
2008	8,976	6,176	3,309	2,867	210	182	392	1,500	1,300	2,800
2009	2,032	1,292	1,071	221	329	68	397	613	127	740
2010	3,513	2,113	1,688	425	318	80	398	1,119	281	1,400
2011	7,880	6,580	4,848	1,732	294	105	399	958	342	1,300
Averages										
01-10	8,609	6,851	5,486	1,365	283	86	369	1,332	427	1,758

[a] Weir count plus spawning ground survey; Trapper 1983, 1985, 1987

Minimum estimates of run size and incomplete counts are bold.

Appendix D. 12. Annual sockeye salmon weir counts, escapements, and samples at the Little Trapper weir, 1983–2011.

Broodstock estimate is based on commercial ratio with tats weir data

	Weir	Actual	Trapper spawning esc		Broodstock		
Year	Count	Spawners	wild	enhanced	Total	wild	enhanced
1983a	7,402	7,402			0		
1984	13,084	13,084			0		
1985a	14,889	14,889			0		
1986	13,820	13,820			0		
1987a	12,007	12,007			0		
1988	10,637	10,637			0		
1989	9,606	9,606			0		
1990	9,443	7,777			1,666	1,666	
1991	22,942	21,001			1,941	1,941	
1992	14,372	12,732			1,640	1,640	
1993	17,432	16,685			747	747	
1994	13,438	12,691			747	747	
1995	11,524	11,524	11,076	448	0		
1996	5,483	5,483	5,296	187	0		
1997	5,924	5,924	5,551	373	0		
1998	8,717	8,717	7,698	1019	0		
1999	11,805	11,805	11,760	45	0		
2000	11,551	11,551	11,551	0	0		
2001	16,860	16,860	16,860	0	0		
2002	7,973	7,973	7,973	0	0		
2003	31,227	31,227	31,227	0	0		
2004	9,613	9,613	9,613	0	0		
2005	16,009	16,009	16,009	0	0		
2006	25,265	24,557	24,557	0	708	708	
2007	7,153	6,340	6,340	0	813	813	
2008	3,831	2,791	2,791	0	1,040	1,040	
2009	5,552	5,443	5,443	0	109	109	
2010	3,347	3,387	3,090	297			
2011	3,809	3,809	3,521	288	0		
Averages							
83-10	12,352	12,005					
01-10	12,683	12,420					

Appendix D. 13. Taku River sockeye salmon run size, 1984–2011.

Run estimate does not include spawning escapements below the U.S./Canada border.

The early season sockeye expansion is based on the proportion of fish wheel sockeye catch that occurs before the fishery opens.

	Above Border M-R		Expansion							
Year	Run Estimate	Start Date	Method	Factor	Expanded Above border Run Estimate	Canadian harvest	Escape.	U.S. Harvest	Terminal Run	Total Exploitation Rate
1984	133,414	17-Jun	Ave.(88-90&95-96) FW CPUE	0.056	141,254	27,292	113,962	57,619	198,873	43%
1985	118,160	16-Jun	Ave.(88-90&95-96) FW CPUE	0.047	123,974	14,411	109,563	74,287	198,261	45%
1986	104,162	22-Jun	Ave.(88-90&95-96) FW CPUE	0.095	115,045	14,939	100,106	60,644	175,689	43%
1987	87,554	21-Jun	Ave.(88-90&95-96) FW CPUE	0.088	96,023	13,887	82,136	54,963	150,986	46%
1988	86,629	19-Jun	1988 FW CPUE	0.065	92,641	12,967	79,674	25,785	118,427	33%
1989	99,467	18-Jun	1989 FW CPUE	0.128	114,068	18,805	95,263	63,366	177,434	46%
1990	117,385	10-Jun	1990 CPUE	0.002	117,573	21,474	96,099	109,285	226,858	58%
1991	153,773	9-Jun	Ave.(88-90&95-96) FW CPUE	0.007	154,873	25,380	129,493	105,271	260,143	50%
1992	162,003	21-Jun	Ave.(88-90&95-96) FW CPUE	0.032	167,376	29,862	137,514	121,176	288,551	52%
1993	138,523	13-Jun	Ave.(88-90&95-96) FW CPUE	0.026	142,148	33,523	108,625	142,089	284,236	62%
1994	129,119	12-Jun	Ave.(88-90&95-96) FW CPUE	0.019	131,580	29,001	102,579	98,063	229,642	55%
1995	145,264	11-Jun	1995 FW CPUE	0.008	146,450	32,711	113,739	91,984	238,434	52%
1996	132,322	9-Jun	1996 FW CPUE	0.017	134,651	42,025	92,626	187,727	322,379	71%
1997	93,816	3-May	1997 FW CPUE	0.017	95,438	24,352	71,086	79,127	174,565	59%
1998	89,992	2-May	No Expansion		89,992	19,277	70,715	49,832	139,824	49%
1999	113,706	14-May	No Expansion		113,706	21,151	92,555	63,058	176,764	48%
2000	115,693	14-May	No Expansion		115,693	28,468	87,225	131,262	246,954	65%
2001	192,245	27-May	No Expansion		192,245	48,117	144,128	204,433	396,678	64%
2002	135,233	19-May	No Expansion		135,233	31,726	103,507	116,401	251,634	59%
2003	193,390	20-May	No Expansion		193,390	33,024	160,366	135,494	328,884	51%
2004	127,047	12-May	No Expansion		127,047	20,359	106,688	77,012	204,059	48%
2005	142,155	5-May	No Expansion		142,155	22,102	120,053	46,090	188,245	36%
2006	167,597	20-May	No Expansion		167,597	21,446	146,151	65,828	233,425	37%
2007	104,815	19-May	FW CPUE	0.002	105,012	17,249	87,763	65,129	170,141	48%
2008	84,073	17-May	FW CPUE after week 34	0.040	87,568	19,509	68,059	75,692	163,260	58%
2009	83,028	12-May	FW CPUE after week 34	0.001	83,097	11,260	71,837	36,232	119,329	40%
2010	103,257	19-May	FW CPUE	0.053	109,028	20,661	88,367	46,767	155,795	43%
2011	139,926	25-Apr	No Expansion		139,926	24,543	115,383	71,804	211,730	46%
Averages										
84-10	124,777	28-May		0.039	127,217	24,258	102,958	88,319	215,536	50%
01-10	133,284	17-May		0.024	134,237	24,545	109,692	86,908	221,145	48%

Appendix D. 14. The terminal run reconstruction of Taku wild and enhanced sockeye salmon, 1984–2011.

	Wild Total Run				Enhanced Total Run			
Year	Canadian harvest	Escape	US harvest	Terminal Run	Canadian harvest	Escape	US harvest	Terminal Run
1984	27,292	113,962	58,543	199,796				
1985	14,411	109,563	73,809	197,783				
1986	14,939	100,106	60,934	175,980				
1987	13,887	82,136	54,124	150,148				
1988	12,967	79,674	25,811	118,452				
1989	18,805	95,263	62,828	176,895				
1990	21,474	94,433	108,499	226,072				
1991	25,380	127,552	103,412	258,285				
1992	29,862	135,874	122,438	289,814				
1993	33,523	107,878	141,038	283,186				
1994	29,001	101,832	97,046	228,626				
1995	31,374	112,048	87,878	231,300	1,337	1,691	4,106	7,134
1996	41,287	91,994	182,944	316,225	738	632	4,783	6,153
1997	23,685	70,481	77,067	171,233	667	605	2,060	3,332
1998	18,681	69,560	48,989	137,230	596	1,155	843	2,594
1999	20,847	92,473	62,441	175,761	304	82	617	1,003
2000	28,025	86,225	129,683	243,933	443	1,000	1,579	3,022
2001	46,231	140,375	195,496	382,101	1,886	3,753	8,938	14,577
2002	31,676	102,848	115,748	250,272	50	659	653	1,362
2003	32,755	159,026	134,717	326,498	269	1,340	777	2,386
2004	20,090	105,974	76,321	202,385	269	714	692	1,674
2005	21,840	119,384	45,497	186,721	262	669	593	1,524
2006	20,628	143,660	63,587	227,875	818	2,491	2,241	5,550
2007	15,467	84,691	61,387	161,544	1,782	3,072	3,742	8,597
2008	17,443	63,892	63,905	145,240	2,066	4,167	11,787	18,020
2009	11,152	71,489	35,984	118,625	108	348	248	704
2010	20,020	87,364	45,824	153,208	641	1,003	943	2,587
2011	22,739	113,022	66,113	201,874	1,803	2,362	5,691	9,856
Averages								
84-10	23,805	101,843	86,517	212,414				
01-10	23,730	107,870	83,846	215,447	815	1,822	3,061	5,698

Appendix D. 15. Annual sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979–2011.

Spawners equals escapement to the weir minus fish collected for brood stock.

	Little Trapper		Little Tatsamenie		Tatsamenie		King Salmon	Kuthai Lake	Nahlin River	Crescent Lake		Speel Lake	
Year	Count	Escape.	Count	Escape.	Count	Escape.	Weir	Weir	Weir	Count	Escape.	Count	Escape.
1980								1,658					
1981								2,299					
1982													
1983[a]	7,402	7,402								19,422	19,422	10,484	10,484
1984	13,084	13,084								6,707	6,707	9,764	9,764
1985[a]	14,889	14,889	13,093	13,093						7,249	7,249	7,073	7,006
1986	13,820	13,820	11,446	11,446						3,414	3,414	5,857	5,457
1987[a]	12,007	12,007	2,794	2,794		25				7,839	7,839	9,319	9,319
1988	10,637	10,637	2,063	2,063					**138**	**1,199**	1,199	969	710
1989	9,606	9,606	3,039	3,039						**1,109**	775	12,229	10,114
1990	9,443	7,777	5,736	4,929					2,515	**1,262**	757	**18,064**	16,867
1991	22,942	21,001	8,381	7,585						**9,208**	8,666	299	299
1992	14,372	12,732	6,576	5,681				**1,457**	**297**	**22,674**	21,849	9,439	8,136
1993	17,432	16,685	5,028	4,230				**6,312**	2,463				
1994	13,438	12,691	4,371	3,578				5,427	960				
1995	11,524	11,524			5,780	4,387		3,310	3,711			**16,208**	14,260
1996	5,483	5,483			10,381	8,026		4,243	2,538			20,000	18,610
1997	5,924	5,924			8,363	5,981		5,746	1,857			**4,999**	
1998	8,717	8,717			5,997	4,735		1,934	345			**13,358**	
1999	11,805	11,805			2,104	1,888		10,042				**10,277**	
2000	11,551	11,551			7,575	5,570		4,096				**6,764**	
2001	16,860	16,860			22,575	19,579		1,663	935			**8,060**	
2002	**7,973**	**7,973**			**5,495**	**4,379**		7,697				**5,016**	
2003	31,227	31,227			4,515	2,965		7,769				**7,014**	
2004	9,613	9,613			1,951	1,357	5,005	1,578		na	na	**7,813**	
2005	16,009	16,009			3,372	2,445	1,046	6,004		na	na	**7,538**	
2006	25,265	24,557			22,475	19,820	2,177	1,015		na	na	**4,163**	
2007	7,153	6,340			11,187	8,384	5	204		na	na	**3,099**	
2008	3,831	2,791			8,976	6,176	888	1,547		na	na	**1,763**	
2009	5,552	5,443			2,032	1,292	55	1,442		na	na	3,689	3,689
2010	3,347	3,387			3,513	2,113	2,977	1,626		na	na	5,570	5,570
2011	3,809	3,809			7,880	6,580	2,899	811		na	na	4,777	4,777
Averages													
83-10	12,175	11,841										8,032	
01-10	12,683	12,420			8,609	6,851	1,736	3,055	935			5,373	

Appendix D. 16. Historical Taku River coho salmon harvested in D111 terminal fisheries, 1992–2011.

Sportfish estimate is based on all landings made in Juneau (not just D11)

	D11 Gillnet		Juneau Sport Fish			
Year	Harvest	SE	Harvest	SE	PU	Total
1992	74,226	23,030	431	380	88	74,745
1993	32,456	8,515	3,222	3,048	25	35,703
1994	82,181	14,117	19,018	8,674	93	101,292
1995	51,286	7,263	7,857	2,920	97	59,240
1996	14,491	2,762	2,461	1,162	67	17,019
1997	1,489	412	4,963	1,674	27	6,479
1998	12,972	2,015	3,984	1,084	86	17,042
1999	5,572	913	3,393	997	44	9,009
2000	7,352	1,355	4,137	1,148	31	11,520
2001	9,212	1,523	2,505	813	22	11,739
2002	26,981	4,257	6,189	1,346	68	33,238
2003	19,659	6,937	5,421	1,727	59	25,139
2004	13,058	2,937	12,720	3,528	120	25,898
2005	18,011	5,679	3,573	1,830	134	21,718
2006	32,051	4,020	3,985	1,017	134	36,170
2007	15,753	2,416	804	488	60	16,617
2008	23,806	5,028	493	362	91	24,390
2009	36,757	5,033	5,949	2,445	240	42,946
2010	41,695	8,703	13,301	4,491	258	55,254
2011	4,829	1,237	4,340	977	224	9,393
averages						
01-10	23,698		5,494		119	29,311

Appendix D. 17. Historical coho salmon in the Canadian fisheries in the Taku River, 1987–2011.

	Commercial					
Year	before SW34	After SW34	Total	Aboriginal	test	test released
1979			6,006			
1980			6,405	0		
1981			3,607			
1982			51			
1983			8,390	0		
1984			5,357	15		
1985			1,770	22		
1986			1,783	50		
1987			5,599	113	807	
1988			3,123	98	422	
1989			2,876	146	1,011	
1990			3,207	6	472	
1991			3,415	20	2,004	
1992			4,077	187	1,277	
1993			3,033	8	1,593	
1994			14,531	162		
1995			13,629	109		
1996			5,028	24		39
1997			2,594	96		
1998			5,090	0		
1999			4,416	471	688	
2000			4,395	342	710	
2001			2,568	500	31	2,976
2002			3,082	688	32	3,767
2003			3,168	416	59	4,031
2004	2,387	3,579	5,966	450	3,268	
2005	1,412	3,512	4,924	162	3,173	
2006	4,947	3,620	8,567	300	2,802	
2007	2,229	3,015	5,244	155	2,674	
2008	2,802	1,104	3,906	67	0	1,012
2009	2,379	3,270	5,649	154	3,963	
2010	3,283	7,066	10,349	59	4,000	
2011	2,353	6,093	8,446	30	4,002	
Averages						
83-10			5,205	172		
01-10			5,342	295	2,000	

Appendix D. 18. Historic Taku River coho salmon terminal run size, 1987–2011.

The run estimates do not include spawningescapements below the U.S/Canada border. Estimates are expanded if mark-recapture acti terminate prior to run completion.

	Above Border M-R		Expansion							Total
Year	Run Estimate	End Date	Method	Factor	Expanded Estimate	Canadian Harvest	Escape.	U.S Harvest	Terminal Run	Exploitation Rate
1987	43,750	20-Sep	Test Fish CPUE	1.42	61,976	6,519	55,457			
1988	43,093	18-Sep		1.00	43,093	3,643	39,450			
1989	60,841	1-Oct		1.00	60,841	4,033	56,808			
1990	75,881			1.00	75,881	3,685	72,196			
1991	132,923			1.00	132,923	5,439	127,484			
1992	49,928	5-Sep	District 111-32 CPUE	1.79	89,270	5,541	83,729	74,745	164,015	0.490
1993	67,448	11-Sep	District 111-32 CPUE	1.84	123,964	4,634	119,330	35,703	159,667	0.253
1994	98,643	24-Sep	District 111-32 CPUE	1.13	111,036	14,693	96,343	101,292	212,328	0.546
1995	61,738	30-Sep	District 111-32 CPUE	1.12	69,448	13,738	55,710	59,240	128,688	0.567
1996	44,172	28-Sep	District 111-32 CPUE	1.12	49,687	5,052	44,635	17,019	66,706	0.331
1997	35,035	27-Sep	District 111-32 CPUE	1.00	35,035	2,690	32,345	6,479	41,514	0.221
1998	49,290	26-Sep	District 111-32 CPUE	1.35	66,472	5,090	61,382	17,042	83,514	0.265
1999	59,052	3-Oct	Troll CPUE	1.12	66,343	5,575	60,768	9,009	75,352	0.194
2000	70,147	2-Oct	no expansion	1.00	70,147	5,447	64,700	11,520	81,667	0.208
2001	107,493	5-Oct	no expansion	1.00	107,493	3,099	104,394	11,739	119,232	0.124
2002	223,162	7-Oct	no expansion	1.00	223,162	3,802	219,360	33,238	256,400	0.144
2003	186,755	8-Oct	no expansion	1.00	186,755	3,643	183,112	25,139	211,894	0.136
2004	139,011	8-Oct	no expansion	1.00	139,011	9,684	129,327	25,898	164,909	0.216
2005	143,817	8-Oct	no expansion	1.00	143,817	8,259	135,558	21,718	165,535	0.181
2006	134,053	8-Oct	no expansion	1.00	134,053	11,669	122,384	36,170	170,223	0.281
2007	82,319	8-Oct	no expansion	1.00	82,319	8,073	74,246	16,617	98,936	0.250
2008	99,199	8-Oct	no expansion	1.00	99,199	3,973	95,226	24,390	123,589	0.229
2009	113,716	8-Oct	no expansion	1.00	113,716	9,766	103,950	42,946	156,662	0.336
2010	141,238	8-Oct	no expansion	1.00	141,238	14,408	126,830	55,254	196,492	0.355
2011	83,349	8-Oct	no expansion	1.00	83,349	12,478	70,871	9,393	92,742	0.236
Averages										
87-10	94,279	30-Sep		1.12	101,120	6,756	94,363	32,903	140,912	0.280
01-10	137,076	7-Oct		1.00	137,076	7,638	129,439	29,311	166,387	0.225

Appendix D. 19. Escapement counts of Taku River coho salmon. Counts are for age-.1 fish and do not include jacks, 1984–2011.

Because of variability between methods, visibility, observers, and timing, these counts are not an index of run strength.

	Yehring Creek		Sockeye Creek	Johnson Creek	Fish Creek	Flannigan Slough	Tatsamenie River	Hacket River	Dudidontu River	Upper Nahlin River	
Year	Weir	Aerial	Aerial	Ar/Foot	Aerial	Aerial	Weir	Weir	Aerial	Aerial	Weir
1984		2,900	275	235	700	1,480					
1985		560	740	150	1,000	2,320	**201**	1,031			
1986	2,116[a]	1,200	**174**	70	**53**	**1,095**	**344**	2,723	108	318	
1987	1,627[a]	**565**	**980**	150	250	**2,100**	**173**	1,715	276	165	
1988	1,423	**658**	**585**	500	**1,215**	**1,308**	663[a]	1,260	367	694	1,322
1989	**1,570**	600	400	400	235	1,670	712[a]		115	322	
1990	**2,522**	220	**193**		**425**	**414**	669[a]		25	256	
1991		**475**	**399**	120	**1,378**	**1,348**	1,101		458	**176**	
1992		**1,267**	**594**	654	478	1,288	730				**970[a]**
1993		**250**	130	90	380	70	**88**				**326**
1994		500	60	450	200	50	168				**2,112**
1995		70	230	170	132	421	**62**				
1996		35	28	50	250	278	**21**				
1997		500	10	550	600						
1998		280		300	450						
1999		1,050			400						
2000		450		500	1,800						
Surveys Discontinued											

[a] Weir count combined with spawning ground count. Tatsamenie 88-90, Yehring 86-87, Nahlin 92.

Appendix D. 20. Historical effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960–2011.

Days open are for the entire district and include openings to harvest spawner chinook salmon, 1960-1975.

	D111		D111-32		
Year	Boat Days	Days Open	Boat Days	Days Open	PU
1960		60.00	1,680	60.00	
1961		62.00	2,901	62.00	
1962		52.00	1,568	52.00	
1963		54.00	1,519	51.00	
1964		56.00	1,491	56.00	
1965		63.00	1,332	60.00	
1966		64.00	1,535	58.00	
1967		53.00	1,663	50.00	
1968		60.00	2,420	60.00	
1969	1,518	41.50	1,413	42.00	
1970	2,688	53.00	2,425	53.00	
1971	3,053	55.00	2,849	55.00	
1972	3,103	51.00	2,797	51.00	
1973	3,286	41.00	3,135	41.00	
1974	2,315	29.50	1,741	30.00	
1975	1,084	15.50	986	15.00	
1976	1,914	25.00	1,582	23.00	
1977	2,258	27.00	1,879	27.00	
1978	2,174	26.00	1,738	24.00	
1979	2,269	28.83	2,011	29.00	
1980	4,123	30.92	3,634	31.00	
1981	2,687	30.00	1,740	22.00	
1982	2,433	35.50	2,130	36.00	
1983	1,274	33.00	1,065	31.00	
1984	2,757	52.50	2,120	39.00	
1985	3,264	48.00	2,116	37.00	54
1986	2,129	32.83	1,413	30.00	
1987	2,514	34.75	1,517	30.00	
1988	2,135	32.00	1,213	29.00	
1989	2,333	41.00	1,909	36.00	75
1990	3,188	38.33	2,879	38.00	95
1991	4,145	57.00	3,324	52.00	88
1992	4,550	50.00	3,407	43.00	125
1993	3,827	43.00	3,372	43.00	128
1994	5,078	66.00	3,960	60.00	116
1995	4,034	49.00	3,061	45.00	106
1996	3,229	46.00	2,685	41.00	130
1997	2,107	33.00	1,761	30.00	123
1998	3,070	48.00	2,007	39.00	130
1999	2,841	59.00	2,563	58.00	147
2000	2,919	40.00	2,325	38.00	128
2001	4,731	54.00	3,635	55.00	163
2002	4,095	62.00	2,792	54.00	136
2003	3,977	73.50	2,685	64.50	133
2004	3,342	59.00	1,627	50.00	131
2005	3,427	68.00	2,947	65.00	132
2006	3,517	89.00	2,470	81.00	105
2007	3,505	64.00	2,941	64.00	91
2008	3,116	49.00	2,223	46.00	125
2009	3,438	62.00	2,600	57.00	113
2010	2,764	54	2,357	54	120
2011	3,303	46.00	2,669	46.00	133
Averages					
60-10	3,005	48	2,258	45	
01-10	3,591	63	2,628	59	125

Appendix D. 21. Historical effort in the Canadian commercial fishery in the Taku River, 1979–2011.

	Commercial	
Year	Boat Days	Days Open
1979	599	50
1980	476	39
1981	243	31
1982	38	13
1983	390	64
1984	288	30
1985	178	16
1986	148	17
1987	280	26
1988	185	15
1989	271	25
1990	295	28
1991	284	25
1992	291	27
1993	363	34
1994	497	74
1995	428	51
1996	415	65
1997	394	47
1998	299	42
1999	300	34
2000	351	39
2001	382	42
2002	286	33
2003	275	44
2004	294	40
2005	561	68
2006	518	77
2007	313	55
2008	245	33
2009	459	98
2010	396	62
2011	440	63
Averages		
79-10	336	42
01-10	373	55

Appendix D. 22. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1984–2011.

Total counts from both fishwheels and suppentmental gillnets when water is low

		Catch							
	Period of						Pink		
Year	Operation	Chinook	Sockeye	Coho	Pink	Chum	even year	odd year	Steelhead
1984	6/15-9/18	138	2,334	889	20,751	316	20,751		
1985	6/16-9/21	184	3,601	1,207	27,670	1,376		27,670	
1986	6/14-8/25	571	5,808	758	7,256	80	7,256		
1987	6/15-9/20	285	4,307	2,240	42,786	1,533		42,786	34
1988	5/11-9/19	1,436	3,292	2,168	3,982	1,089	3,982		34
1989	5/05-10/01	1,811	5,650	2,243	31,189	645		31,189	38
1990	5/03-9/23	1,972	6,091	1,860	13,358	748	13,358		43
1991	6/08-10/15	680	5,102	4,922	23,553	1,063		23,553	138
1992	6/20-9/24	212	6,279	2,103	9,252	189	9,252		22
1993	6/12-9/29	562	8,975	2,552	1,625	345		1,625	16
1994	6/10-9/21	906	6,485	4,792	27,100	367	27,100		107
1995	5/4-9/27	1,535	6,228	2,535	1,712	218		1,712	61
1996	5/3-9/20	1,904	5,919	1,895	21,583	388	21,583		68
1997	5/3-10/1	1,321	5,708	1,665	4,962	485		4,962	103
1998	5/2-9/15	894	4,230	1,777	23,347	179	23,347		119
1999	5/3-10/3	440	4,636	1,848	23,503	164		23,503	119
2000	4/23-10/3	1,211	5,865	1,877	6,529	423	6,529		160
2001	4/23-10/5	1,262	6,201	2,380	9,134	250		9,134	125
2002	4/24-10/7	1,578	5,812	3,766	5,672	205	5,672		87
2003	4/20-10/08	1,351	5,970	3,002	15,492	268		15,492	93
2004	4/30-10/06	2,234	6,255	3,163	8,464	414	8,464		63
2005	4/25-10/05	517	3,953	1,476	15,839	258		15,839	79
2006	4/27-10/03	544	5,296	2,811	21,725	466	21,725		47
2007	4/27-10/01	430	7,698	2,117	12,405	482		12,405	57
2008	4/23-10/03	1,298	3,736	2,213	4,704	350	4,704		
2009	4/24-9/27	688	3,489	3,051	9,234	231		9,225	52
2010	4/24-9/27	778	3,244	2,123	8,868	94	8,868		176
2011	4/25-10/02	728	3,671	1,843	17,775	177		17,775	93
Averages									
84-10		990	5,265	2,349	14,878	468	13,042	16,853	80
01-10		1,068	5,165	2,610	11,154	302	9,887	12,419	87

Appendix E. 1. Weekly salmon harvest and effort in the lower Alsek River fisheries, 2011.

						Effort		
SW	Chinook	Sockeye	Coho	Pink	Chum	Boats	Days Open	Boat Days
Test Fishery								
21	7	4	0	0	0	1	5.67	
22	41	4	0	0	0	1	5.67	
23	196	55	0	0	0	1	5.67	
24	92	27	0	0	0	1	3.67	
25	68	51	0	0	0	1	4.67	
26	17	16	0	0	0	1	4.67	
27								
Total	421	157	0	0	0			
Commercial Fishery								
23								0.0
24	209	991	0	0	0	11	2.0	22.0
25	164	585	0	0	0	12	1.0	12.0
26	133	495	0	0	0	12	1.0	12.0
27	28	2,156	0	0	0	13	2.0	26.0
28	7	6,423	0	0	0	12	3.0	36.0
29	5	7,118	0	0	0	15	3.0	45.0
30	0	4,572	0	0	0	8	3.0	24.0
31	0	1,364	0	0	0	5	2.0	10.0
32-34	0	444	27	0	0	4	5.0	20.0
35						0	3.0	0.0
36	0	9	468	0	1	4	3.0	12.0
37	0	9	466	0	4	4	3.0	12.0
38-39	0	3	653	0	6	6	6.0	36.0
40						0	3.0	0.0
Total	546	24,169	1,614	0	11		40	267

Appendix E. 2. Weekly salmon harvest and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2011.

Aboriginal includes estimates of sport catch (kept and released) in Takhanne and Blanchard rivers; estimates based on salmon catch card information.

	Chinook				Sockeye				Coho			
	Recreational			Total	Recreational			Total	Recreational			Total
SW	Kept	Released	Aboriginal	harvest	Kept	Released	Aboriginal	harvest	Kept	Released	Aboriginal	harvest
24	0	0			0	0			0	0		
25	0	0			0	0			0	0		
26	0	0			0	0			0	0		
27	7	3			0	0			0	0		
28	17	22	Weekly		0	12	Weekly		0	0	Weekly	
29	27	38	Data		0	13	Data		0	0	Data	
30	42	87	Not		0	23	Not		0	0	Not	
31	3	87	Available		0	60	Available		0	0	Available	
32	0	37			0	37			0	0		
33	0	0			0	0			0	0		
34	0	2			0	3			0	0		
35	0	0			10	12			0	0		
36	0	0			32	10			0	0		
37	0	0			3	8			0	0		
38	0	0			8	32			2	27		
39	0	0			0	10			5	5		
40	0	0			3	0			3	10		
41	0	0			0	0			10	8		
42	0	0			0	0			0	0		
43	0	0			0	0			0	0		
44	0	0			0	0			0	0		
45	0	0			0	0			0	0		
46	0	0			0	0			0	0		
Total	95	275	119	214	57	220	2,053	2,110	20	50	9	29
Village Creek food fish			NA				NA				NA	
Harvest at Klukshu River Weir			3				262				9	
Food fish above Klukshu Weir			58				358				0	

Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2011.

Jack Chinook salmon included in the Chinook salmon counts.

	Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
10-Jun	0	0	0.000	0	0	0.000	0	0	0.000
11-Jun	0	0	0.000	0	0	0.000	0	0	0.000
12-Jun	0	0	0.000	0	0	0.000	0	0	0.000
13-Jun	0	0	0.000	0	0	0.000	0	0	0.000
14-Jun	0	0	0.000	0	0	0.000	0	0	0.000
15-Jun	2	2	0.001	0	0	0.000	0	0	0.000
16-Jun	0	2	0.001	0	0	0.000	0	0	0.000
17-Jun	1	3	0.002	0	0	0.000	0	0	0.000
18-Jun	0	3	0.002	1	1	0.000	0	0	0.000
19-Jun	2	5	0.003	4	5	0.000	0	0	0.000
20-Jun	1	6	0.004	0	5	0.000	0	0	0.000
21-Jun	0	6	0.004	2	7	0.000	0	0	0.000
22-Jun	0	6	0.004	2	9	0.000	0	0	0.000
23-Jun	2	8	0.005	2	11	0.001	0	0	0.000
24-Jun	2	10	0.006	1	12	0.001	0	0	0.000
25-Jun	1	11	0.007	3	15	0.001	0	0	0.000
26-Jun	4	15	0.009	8	23	0.001	0	0	0.000
27-Jun	1	16	0.010	9	32	0.001	0	0	0.000
28-Jun	1	17	0.010	5	37	0.002	0	0	0.000
29-Jun	2	19	0.011	6	43	0.002	0	0	0.000
30-Jun	0	19	0.011	2	45	0.002	0	0	0.000
1-Jul	0	19	0.011	29	74	0.003	0	0	0.000
2-Jul	0	19	0.011	4	78	0.004	0	0	0.000
3-Jul	0	19	0.011	6	84	0.004	0	0	0.000
4-Jul	2	21	0.013	11	95	0.004	0	0	0.000
5-Jul	5	26	0.016	3	98	0.005	0	0	0.000
6-Jul	9	35	0.021	6	104	0.005	0	0	0.000
7-Jul	19	54	0.032	19	123	0.006	0	0	0.000
8-Jul	20	74	0.044	20	143	0.007	0	0	0.000
9-Jul	8	82	0.049	9	152	0.007	0	0	0.000
10-Jul	20	102	0.061	10	162	0.008	0	0	0.000
11-Jul	16	118	0.071	41	203	0.009	0	0	0.000
12-Jul	21	139	0.083	38	241	0.011	0	0	0.000
13-Jul	44	183	0.110	11	252	0.012	0	0	0.000
14-Jul	36	219	0.131	19	271	0.013	0	0	0.000
15-Jul	75	294	0.176	30	301	0.014	0	0	0.000
16-Jul	43	337	0.202	8	309	0.014	0	0	0.000
17-Jul	24	361	0.216	7	316	0.015	0	0	0.000
18-Jul	50	411	0.246	10	326	0.015	0	0	0.000
19-Jul	194	605	0.362	32	358	0.017	0	0	0.000
20-Jul	38	643	0.385	6	364	0.017	0	0	0.000
21-Jul	177	820	0.491	101	465	0.022	0	0	0.000
22-Jul	39	859	0.514	34	499	0.023	0	0	0.000
23-Jul	151	1,010	0.605	135	634	0.030	0	0	0.000
24-Jul	53	1,063	0.637	1	635	0.030	0	0	0.000
25-Jul	24	1,087	0.651	0	635	0.030	0	0	0.000
26-Jul	38	1,125	0.674	3	638	0.030	0	0	0.000
27-Jul	56	1,181	0.707	7	645	0.030	0	0	0.000
28-Jul	99	1,280	0.766	226	871	0.041	0	0	0.000
29-Jul	29	1,309	0.784	14	885	0.041	0	0	0.000
30-Jul	38	1,347	0.807	59	944	0.044	0	0	0.000
31-Jul	87	1,434	0.859	72	1,016	0.048	0	0	0.000
1-Aug	35	1,469	0.880	136	1,152	0.054	0	0	0.000
2-Aug	19	1,488	0.891	49	1,201	0.056	0	0	0.000
3-Aug	1	1,489	0.892	1	1,202	0.056	0	0	0.000
4-Aug	44	1,533	0.918	137	1,339	0.063	0	0	0.000
5-Aug	30	1,563	0.936	384	1,723	0.081	0	0	0.000
6-Aug	8	1,571	0.941	38	1,761	0.082	0	0	0.000
7-Aug	6	1,577	0.944	440	2,201	0.103	0	0	0.000
8-Aug	7	1,584	0.949	827	3,028	0.142	0	0	0.000
9-Aug	21	1,605	0.961	587	3,615	0.169	0	0	0.000
10-Aug	6	1,611	0.965	558	4,173	0.195	0	0	0.000
11-Aug	10	1,621	0.971	522	4,695	0.220	0	0	0.000
12-Aug	1	1,622	0.971	165	4,860	0.227	0	0	0.000
13-Aug	21	1,643	0.984	402	5,262	0.246	0	0	0.000
14-Aug	1	1,644	0.984	57	5,319	0.249	0	0	0.000

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	Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
15-Aug	3	1,647	0.986	316	5,635	0.263	0	0	0.000
16-Aug	3	1,650	0.988	366	6,001	0.281	0	0	0.000
17-Aug	4	1,654	0.990	958	6,959	0.325	0	0	0.000
18-Aug	1	1,655	0.991	237	7,196	0.336	0	0	0.000
19-Aug	0	1,655	0.991	1,074	8,270	0.387	0	0	0.000
20-Aug	4	1,659	0.993	1,280	9,550	0.446	0	0	0.000
21-Aug	4	1,663	0.996	976	10,526	0.492	0	0	0.000
22-Aug	3	1,666	0.998	386	10,912	0.510	0	0	0.000
23-Aug	1	1,667	0.998	409	11,321	0.529	0	0	0.000
24-Aug	0	1,667	0.998	1,618	12,939	0.605	0	0	0.000
25-Aug	1	1,668	0.999	1,547	14,486	0.677	0	0	0.000
26-Aug	0	1,668	0.999	241	14,727	0.689	0	0	0.000
27-Aug	0	1,668	0.999	419	15,146	0.708	0	0	0.000
28-Aug	0	1,668	0.999	634	15,780	0.738	0	0	0.000
29-Aug	0	1,668	0.999	788	16,568	0.775	0	0	0.000
30-Aug	0	1,668	0.999	988	17,556	0.821	0	0	0.000
31-Aug	0	1,668	0.999	130	17,686	0.827	0	0	0.000
1-Sep	2	1,670	1.000	385	18,071	0.845	0	0	0.000
2-Sep	0	1,670	1.000	242	18,313	0.856	0	0	0.000
3-Sep	0	1,670	1.000	374	18,687	0.874	0	0	0.000
4-Sep	0	1,670	1.000	517	19,204	0.898	0	0	0.000
5-Sep	0	1,670	1.000	86	19,290	0.902	0	0	0.000
6-Sep	0	1,670	1.000	306	19,596	0.916	0	0	0.000
7-Sep	0	1,670	1.000	39	19,635	0.918	0	0	0.000
8-Sep	0	1,670	1.000	33	19,668	0.920	0	0	0.000
9-Sep	0	1,670	1.000	257	19,925	0.932	0	0	0.000
10-Sep	0	1,670	1.000	20	19,945	0.932	0	0	0.000
11-Sep	0	1,670	1.000	17	19,962	0.933	0	0	0.000
12-Sep	0	1,670	1.000	6	19,968	0.934	0	0	0.000
13-Sep	0	1,670	1.000	262	20,230	0.946	1	1	0.000
14-Sep	0	1,670	1.000	15	20,245	0.947	0	1	0.000
15-Sep	0	1,670	1.000	0	20,245	0.947	0	1	0.000
16-Sep	0	1,670	1.000	1	20,246	0.947	0	1	0.000
17-Sep	0	1,670	1.000	8	20,254	0.947	0	1	0.000
18-Sep	0	1,670	1.000	98	20,352	0.952	2	3	0.001
19-Sep	0	1,670	1.000	83	20,435	0.955	1	4	0.002
20-Sep	0	1,670	1.000	120	20,555	0.961	2	6	0.003
21-Sep	0	1,670	1.000	29	20,584	0.962	3	9	0.004
22-Sep	0	1,670	1.000	22	20,606	0.963	2	11	0.005
23-Sep	0	1,670	1.000	21	20,627	0.964	2	13	0.006
24-Sep	0	1,670	1.000	47	20,674	0.967	5	18	0.008
25-Sep	0	1,670	1.000	10	20,684	0.967	11	29	0.014
26-Sep	0	1,670	1.000	35	20,719	0.969	10	39	0.018
27-Sep	0	1,670	1.000	18	20,737	0.970	9	48	0.023
28-Sep	0	1,670	1.000	28	20,765	0.971	8	56	0.026
29-Sep	0	1,670	1.000	184	20,949	0.979	470	526	0.248
30-Sep	0	1,670	1.000	34	20,983	0.981	138	664	0.313
1-Oct	0	1,670	1.000	11	20,994	0.982	95	759	0.358
2-Oct	0	1,670	1.000	5	20,999	0.982	19	778	0.367
3-Oct	0	1,670	1.000	17	21,016	0.983	29	807	0.381
4-Oct	0	1,670	1.000	123	21,139	0.988	612	1,419	0.670
5-Oct	0	1,670	1.000	250	21,389	1.000	700	2,119	1.000
6-Oct		1,670	1.000		21,389	1.000		2,119	1.000
7-Oct		1,670	1.000		21,389	1.000		2,119	1.000
Total Count		1,670			21,389			2,119	
Adjustments		0			0			0	
Harvest at weir		3			262			9	
Harvest above weir		58			358			0	
Total Escapement		1,609			20,769			2,110	

Appendix E. 4. Salmon harvest and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2011.

						Effort	
Year	Chinook	Sockeye	Coho	Pink	Chum	Boat Days	Days Open
1960							
1961	2,120	23,339	7,679	84	86	1,436	80.0
1962							
1963	131	6,055	7,164	42	34	692	68.0
1964	591	14,127	9,760	144	367	592	68.0
1965	719	28,487	9,638	10	72	1,016	72.0
1966	934	29,091	2,688	22	240	500	64.0
1967	225	11,108	10,090	107	30	600	68.0
1968	215	26,918	10,586	82	240	664	68.0
1969	685	29,259	2,493	38	61	807	61.0
1970	1,128	22,654	2,188	6	26	670	52.3
1971	1,222	25,314	4,730	3	120	794	60.5
1972	1,827	18,717	7,296	37	280	640	65.0
1973	1,757	26,523	4,395	26	283	894	52.0
1974	1,162	16,747	7,046	13	107	699	46.0
1975	1,379	13,842	2,230	16	261	738	58.0
1976	512	19,741	4,883	0	368	550	58.5
1977	1,402	40,780	11,817	689	483	882	57.0
1978	2,441	50,580	13,913	59	233	929	57.0
1979	2,525	41,449	6,158	142	263	1,110	51.0
1980	1,382	25,522	7,863	21	1,005	773	42.0
1981	779	23,641	10,232	65	816	588	40.0
1982	532	27,443	6,534	6	358	552	33.0
1983	94	18,293	5,253	20	432	487	38.0
1984	60	14,326	7,868	24	1,610	429	33.0
1985	213	5,792	5,490	3	427	277	33.0
1986	481	24,791	1,344	13	462	517	34.0
1987	347	11,393	2,517	0	1,924	388	40.5
1988	223	6,286	4,986	7	908	324	34.0
1989	228	13,513	5,972	2	1,031	378	38.0
1990	78	17,013	1,437	0	495	374	38.0
1991	103	17,542	5,956	0	105	530	49.0
1992	301	19,298	3,116	1	120	372	46.0
1993	300	20,043	1,215	0	49	372	40.0
1994	805	19,639	4,182	0	32	403	61.0
1995	670	33,112	14,184	13	347	879	53.5
1996	772	15,182	5,514	0	165	419	51.0
1997	568	25,879	11,427	0	34	611	59.0
1998	550	15,007	4,925	1	145	358	41.0
1999	482	11,441	5,660	0	112	319	44.0
2000	677	9,522	5,103	5	130	307	37.0
2001	541	13,995	2,909	8	17	234	50.0
2002	700	16,918	9,525	0	1	270	73.0
2003	937	39,698	47	0	0	271	60.0
2004	656	18,030	2,475	0	2	280	76.5
2005	286	7,572	1,196	0	0	171	41.0
2006	530	9,842	701	2	3	248	45.0
2007	400	19,795	134	0	0	199	47.0
2008	128	2,815	2,668	0	0	177	34.0
2009	602	12,906	3,454	0	20	200	44.0
2010	273	12,668	1,884	0	9	192	37.0
2011	546	24,169	1,614	0	11	235	46.0
Averages							
61-10	724	19,956	5,443	34	286	527	51
01-10	505	15,424	2,499	1	5	224	51

Appendix E. 5. Salmon harvest in the U.S. Chinook salmon test fishery in the Alsek River, 2005–2011.

Year	Chinook	Sockeye
2005	423	222
2006	135	224
2007	347	367
2008	465	55
—		
2011	421	157

Appendix E. 6. Salmon harvest in the U.S. subsistence and personal use fisheries in the Alsek River, 1976–2011.

Year	Chinook	Sockeye	Coho
1976	13	51	5
1977	18	113	0
1978			
1979	80	35	70
1980	57	41	62
1981	32	50	74
1982	87	75	50
1983	31	25	50
1984			
1985	16	95	0
1986	22	241	45
1987	27	173	31
1988	13	148	9
1989	20	131	34
1990	85	144	12
1991	38	104	0
1992	15	37	44
1993	38	96	28
1994	60	47	20
1995	51	167	53
1996	60	67	28
1997	38	273	26
1998	63	158	42
1999	44	152	21
2000	73	146	31
2001	19	72	45
2002	60	232	35
2003	24	176	27
2004	51	224	21
2005	31	63	62
2006	47	272	23
2007	79	298	27
2008	34	200	28
2009	57	245	17
2010	70	259	0
2011	42	175	18
Averages			
76-10	44	140	31
01-10	47	204	29

Appendix E. 7. Salmon catches in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976 to 2011.

	Chinook			Sockeye			Coho		
Year	Aboriginal	Recreational	Total	Aboriginal	Recreational	Total	Aboriginal	Recreational	Total
1976	150	200	350	4,000	600	4,600	0	100	100
1977	350	300	650	10,000	500	10,500	0	200	200
1978	350	300	650	8,000	500	8,500	0	200	200
1979	1,300	650	1,950	7,000	750	7,750	0	100	100
1980	150	200	350	800	600	1,400	0	200	200
1981	150	315	465	2,000	808	2,808	0	109	109
1982	400	224	624	5,000	755	5,755	0	109	109
1983	300	312	612	2,550	732	3,282	0	16	16
1984	100	475	575	2,600	289	2,889	0	20	20
1985	175	250	425	1,361	100	1,461	50	100	150
1986	102	165	267	1,914	307	2,221	0	9	9
1987	125	367	492	1,158	383	1,541	0	49	49
1988	43	249	292	1,604	322	1,926	0	192	192
1989	234	272	506	1,851	319	2,170	0	227	227
1990	202	555	757	2,314	392	2,706	0	75	75
1991	509	388	897	2,111	303	2,414	0	227	227
1992	148	103	251	2,592	582	3,174	0	213	213
1993	152	171	323	2,361	329	2,690	0	37	37
1994	289	197	486	1,745	261	2,006	8	69	77
1995	580	1,044	1,624	1,745	682	2,427	83	527	610
1996	448	650	1,098	1,204	157	1,361	56	9	65
1997	232	298	530	484	36	520	5	0	5
1998	171	175	346	567	18	585	72	40	112
1999	238	174	412	554	0	554	0	28	28
2000	65	77	142	745	0	745	51	1	52
2001	120	157	277	1,173	4	1,177	5	94	99
2002	120	197	317	2,194	61	2,255	6	283	289
2003	90	138	228	2,734	61	2,795	0	192	192
2004	139	46	185	1,875	247	2,122	0	127	127
2005	58	56	114	581	13	594	20	51	71
2006	2	17	19	1,321	6	1,327	0	0	0
2007	1	40	41	1,330	10	1,340	1	0	1
2008	0	7	7	0	0	0	26	8	34
2009	105	20	125	715	2	717	3	0	3
2010	197	97	294	1,704	12	1,716	4	3	7
2011	119	95	214	2,053	57	2,110	9	20	29
Averages									
76-10	223	254	477	2,282	290	2,572	11	103	114
01-10	83	77	161	1,363	42	1,404	7	76	82

Appendix E. 8. Canadian harvest of Chinook, sockeye, and coho salmon at or above the Klukshu weir, 2009 to 2011.

	Chinook			sockeye			coho		
	Village Creek	At weir	Above weir	Village Creek	At weir	Above weir	Village Creek	At weir	Above weir
2009	NA	52	1	NA	128	75	NA	3	0
2010	NA	99	0	NA	323	91	NA	4	0
2011	NA	58	3	NA	358	262	NA	9	0

Appendix E. 9. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2011.

The escapement count equals the weir count minus the aboriginal fishery harvest above the weir and brood stock taken.
The remainder of the food fishery harvest occurred below the weir, at Village Creek, and Blanchard and Takhanne rivers.
Jack Chinook salmon are included in Chinook counts.
Coho counts are partial counts; weir is removed prior to the end of the run.

	Chinook		Sockeye				Coho	
Year	Count	Escape	Early (to August 16)	Late	Total	Escape	Count	Escape
1976	1,278	1,153	181	11,510	11,691	7,941	1,572	
1977	3,144	2,894	8,931	17,860	26,791	15,441	2,758	
1978	2,976	2,676	2,508	24,359	26,867	19,017	30	
1979	4,404	2,454	977	11,334	12,311	7,051	175	
1980	2,637	2,487	1,008	10,742	11,750	10,850	704	
1981	2,113	1,963	997	19,351	20,348	18,448	1,170	
1982	2,369	1,969	7,758	25,941	33,699	28,899	189	
1983	2,537	2,237	6,047	14,445	20,492	18,017	303	
1984	1,672	1,572	2,769	9,958	12,727	10,227	1,402	
1985	1,458	1,283	539	18,081	18,620	17,259	350	
1986	2,709	2,607	416	24,434	24,850	22,936	71	
1987	2,616	2,491	3,269	7,235	10,504	9,346	202	
1988	2,037	1,994	585	8,756	9,341	7,737	2,774	
1989	2,456	2,289	3,400	20,142	23,542	21,636	2,219	
1990	1,915	1,742	1,316	24,679	25,995	24,607	315	
1991	2,489	2,248	1,924	17,053	18,977	17,645	8,540	8,478
1992	1,367	1,242	11,339	8,428	19,767	18,269	1,145	1,145
1993	3,302	3,220	5,369	11,371	16,740	14,921	788	788
1994	3,727	3,628	3,247	11,791	15,038	13,892	1,232	1,232
1995	5,678	5,394	2,289	18,407	20,696	19,817	3,614	3,564
1996	3,599	3,382	1,502	6,818	8,320	7,891	3,465	3,465
1997	2,989	2,829	6,565	4,931	11,496	11,303	307	302
1998	1,364	1,347	597	12,994	13,591	13,580	1,961	1,961
1999	2,193	2,168	371	5,010	5,381	5,101	2,531	2,531
2000	1,365	1,321	237	5,314	5,551	5,422	4,832	4,791
2001	1,825	1,738	908	9,382	10,290	9,329	748	746
2002	2,240	2,134	11,904	13,807	25,711	23,587	9,921	9,921
2003	1,737	1,661	3,084	31,278	34,362	32,120	3,689	3,689
2004	2,525	2,445	3,464	11,884	15,348	13,721	750	750
2005	1,070	963	994	2,379	3,373	3,167	683	663
2006	568	566	247	13,208	13,455	12,890	420	420
2007	677	676	2,725	6,231	8,956	8,310	300	299
2008	466	466	43	2,698	2,741	2,741	4,275	4,249
2009	1,571	1,518	1,247	4,484	5,731	5,528	424	421
2010	2,358	2,259	5,073	13,887	18,960	18,546	2,365	2,361
2011	1,671	1,610	5,635	15,767	21,402	20,782	2,119	2,110
Averages								
76-10	2,269	2,086	2,967	13,148	16,115	14,205	1,892	
01-10	1,504	1,443	2,969	10,924	13,893	12,994	2,358	2,352

Appendix E. 10. Alsek River sockeye salmon escapement 2000 to 2011.

The 2000-2004 estimates are based on a mark-recapture study; starting in 2005 estimates based on GSI analysis and the expansion of the Klukshu River weir count.

	Inriver Run	CI		Canadian	Spawning	U.S.	Total	Percent
Year	Estimate	Lower	Upper	Harvest	Escapement	Harvest	Run	Klukshu
2000	37,887	23,410	52,365	745	37,142	9,668	47,555	14.7%
2001	31,164	23,143	39,185	1,177	29,987	14,067	45,231	33.0%
2002	95,427	55,893	134,961	2,255	93,172	17,150	112,577	26.9%
2003	103,507	74,350	132,664	2,795	100,712	39,874	143,381	33.2%
2004	83,703	39,566	127,841	2,122	81,581	18,254	101,957	18.3%
2005	57,817	21,907	93,727	594	57,223	7,857	65,674	5.8%
2006	48,901	41,234	56,569	1,327	47,574	10,338	59,239	27.5%

2011	86,009	72,970	99,049	2,110	83,899	24,501	110,510	26.6%
Averages								
00-06, 1	68,052			1,641	66,411	17,714	85,766	23.3%

Appendix E. 11. Alsek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985–2011.

Surveys not made every year at each tributary. Canaidan surveys-include several streams from Lo-Fog to Goat Creek. Village Creek counter 1986-2011.

	U.S. Aerial Surveys				Canada Aerial Surveys		
Year	Basin Creek	Cabin Creek	Muddy Creek	Tanis River	Tatshenshini River	Neskataheen Lake	Village Creek Counter
1985	2,600			2,200			
1986	100		300	2,700	536	750	1,490
1987	350	220		1,600			1,875
1988	500			750	433	456	**433**
1989	320			680	1,689	1,700	9,569
1990	275	300		3,500			**5,313**
1991				800			**86**
1992	1,000	10		50			**7,447**
1993	4,800			900			**2,104**
1994	250			600	366		**3,921**
1995	2,700			350			4,042
1996	325			650			1,583
1997	600			350			2,267
1998				130			826
1999[a]	30			800			**NA**
2000	25			180			1,860
2001				700			**1,897**
2002	No surveys flown						2,765
2003	No surveys flown						**2,778**
2004	No surveys flown						**1,968**
2005	No surveys flown						1,408
2006	No surveys flown						979
2007	No surveys flown						10,254
2008[a]	No surveys flown					1,000	NA
2009	No surveys flown					4,500	**887**
2010	No surveys flown					2,500	**2,305**
2011	No surveys flown					150	355
Averages							
86-10							2,959
01-10							2,805

[a] No counts due to malfunction of the counter

Appendix E. 12. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2011.

Year	Blanchard River	Takhanne River	Goat Creek
1984	304	158	28
1985	232	184	
1986	556	358	142
1987	624	395	85
1988	437	169	54
1989	[a]	158	34
1990	[a]	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67
1995	338	260	[b]
1996	132	230	12
1997	109	190	
1998	71	136	39
1999	371	194	51
2000	163	152	33
2001	543	287	21
2002	351	220	86
2003	127	105	10
2004	84	46	no survey
2005	112	47	7
2006	98	28	9
2007	39	32	45
2008	65	41	11
2009	No surveys conducted		
2010	No surveys conducted		
2011	No surveys conducted		

[a] Not surveyed due to poor visibility. 89,90 Blanchard

[b] Late survey date which missed the peak of spawning.

Appendix E. 13. Alsek River run of large Chinook salmon, 1997–2004. Estimates are based on a mark–recapture study and include the percent of Chinook salmon.

Estimates are based on a mark-recapture study and include the percent of Chinook salmon spawning in the Klukshu River; the program was discontinued in 2005.

	Inriver Run			U.S. Harvest		Total			
	Past	CI		Dry Bay		Inriver	Canadian Harvest		
Year	Dry Bay	Lower	Upper	Commercial	Subsistence	Run	Aboriginal	Sport	Escapement
1997	15,250	9,081	21,418	568	38	15,856	232	298	14,720
1998	4,967	3,027	9,765	550	63	5,580	171	175	4,621
1999	11,969	8,243	22,035	482	44	12,495	238	174	11,557
2000	8,432	6,805	14,308	677	73	9,182	65	77	8,290
2001	11,246	9,146	14,303	541	19	11,806	120	157	10,969
2002	8,807	8,345	10,790	700	60	9,567	120	197	8,490
2003	5,105	4,302	6,310	937	24	6,066	90	138	4,877
2004	7,565			656	38	8,259	139	46	7,380
Averages									
97-04	9,168	6,993	14,133	639	45	9,851	147	158	8,863

Klukshu weir count of large Chinook salmon as a percent of the Alsek escapement of large Chinook salmon

	Weir Count		Percent
Year	All	Large	Klukshu
1997	2,989	2,864	19.5%
1998	1,364	1,184	25.6%
1999	2,193	1,663	14.4%
2000	1,365	1,218	14.7%
2001	1,825	1,538	14.0%
2002	2,240	2,067	24.3%
2003	1,737	1,313	26.9%
2004	2,525	2,376	32.2%
Averages			
97-04	2,030	1,778	21.5%

Appendix E. 14. Alsek River Chinook salmon escapement, 2007.

Estimates was based on GSI analysis and the expansion of the Klukshu River weir count.

Year	Inriver Run Estimate	CI Lower	Upper	Canadian Harvest	Spawning Escapement	U.S. Harvest	Total Run	Percent Klukshu
2007	1,770	1,373	2,166	41	1,729	826	2,596	40.6%
—							0	
2011	3,425	2,802	4,048	214	3,211	1,009	4,434	52.1%

Appendix E. 15. Aerial survey counts of coho salmon from U.S. lower Alsek River tributaries, 1985–2000.

Year	Combined U.S.Tributary Counts
1985	450
1986	1,100
1987	100
1988	1,900
1989	1,990
1990	1,600
1991[a]	500
1992[a]	1,010
1993[a]	800
1994[a]	975
1995	1,050
1996	1,550
1997	No surveys due to poor weather conditions
1998	500
1999	No surveys due to poor weather conditions
2000	620

[a] Few systems surveyed.

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989–2011.

Numbers for eggs and fry are millions.

Eggs collected from Tahltan broodstock are used for outplants to both Tahltan and Tuya Lakes.

	Egg Take		Designated	Fry	Percent	Survival		Thermal
Brood Year	Target	Collected	Tahltan	Planted	Fertilized	Fertilized Egg to Fry	Green Egg to Fry	Mark Pattern
1989[a]	3.000	2.955	2.955	1.042	0.704	0.501	0.353	1:1.4
1990	5.000	4.511	4.511	3.585	0.824	0.964	0.795	1:1.3
1991	5.000	4.246	1.514	1.415	0.949	0.984	0.935	1:1.4
1992	5.400	4.901	2.154	1.947	0.919	0.983	0.904	1:1.4+2.3
1993	6.000	6.140	0.969	0.904	0.946	0.986	0.933	1:1.6+2.5n
1994	6.000	4.183	1.418	1.143	0.929	0.868	0.806	1:1.6
1995	6.000	6.891	3.008	2.296	0.906	0.843	0.763	1:1.7
1996	6.000	6.402	3.169	2.248	0.923	0.769	0.709	1:1.6
1997	6.000	3.221	2.700	1.900	0.812	0.867	0.704	2:1.6
1998	6.000	4.022	1.998	1.671	0.911	0.918	0.836	1:1.7
1999	6.000	3.826	2.773	2.228	0.901	0.892	0.804	2:1.6
2000	6.000	2.388	2.388	1.873	0.920	0.852	0.784	1:1.7
2001	6.000	3.306	3.306	2.533	0.829	0.924	0.766	2:1.6
2002	6.000	4.050	2.780	2.623	0.926	1.018	0.943	1:1.7
2003	6.000	5.391	2.661	2.226	0.899	0.931	0.836	1.6&1:1.5+2.4
2004	6.000	5.701	1.966	1.226	0.803	0.777	0.624	1:1.6+2.6
2005	6.000	4.552	1.809	1.280	0.800	0.885	0.708	1:1.4+2.2
2006	6.000	4.364	2.954	2.466	0.910	0.917	0.835	1:1.3n,2.2
2007	6.000	4.060	2.209	1.540	0.756	0.922	0.697	1,2n,3H
2008	6.000	3.386	2.398	1.395	0.850	0.684	0.582	1,4H
2009	6.000	4.469	2.609	1.830	0.774	0.906	0.701	5,2H
2010	6.000	6.000	3.097	1.230	0.824	0.482	0.397	4,3H
2011	6.000	6.481	3.383	2.130	0.854	0.737	0.630	3,2n,2H
Averages								
89-10	5.745	4.498	2.516	1.845	0.864	0.858	0.746	
01-10	6.000	4.528	2.579	1.835	0.837	0.845	0.709	

Appendix F. 2. Tuya Lake fry plants and survivals, 1991–2011.

Numbers for eggs and fry are millions.

Brood Year	Egg Take Designated Tuya	Fry Planted	Percent Fertilized	Survival		Thermal Mark Pattern
				Fertilized Egg to Fry	Green Egg to Fry	
1991	2.732	1.632	0.944	0.633	0.597	1:1.6
1992	2.747	1.990	0.929	0.780	0.724	1:1.7
1993	5.171	4.691	0.911	0.996	0.907	1:1.4+2.5n
1994	2.765	2.267	0.870	0.943	0.820	1:1.4
1995	3.883	2.474	0.795	0.802	0.637	1:1.4+2.4
1996	3.233	2.611	0.932	0.867	0.808	1:1.4
1997	0.521	0.433	0.911	0.912	0.830	2:1.4
1998	2.024	1.603	0.917	0.864	0.792	1:1.4
1999	1.053	0.867	0.960	0.857	0.823	2:1.4
2000	All eggs collected in 2000 and 2001 were for backplant into Tahltan Lake.					
2001						
2002	1.271	1.124	0.904	0.978	0.885	1:1.7+2.3
2003	2.730	2.445	0.927	0.966	0.895	1:1.4
2004	3.734	3.200	0.921	0.931	0.857	1:1.6+2.4
2005	2.744	2.138	0.900	0.866	0.779	1:1.4+2.4
2006	1.410	1.201	0.920	0.926	0.852	1:1.3,2.3
2007	1.852	1.537	0.856	0.970	0.830	2,1,3H
2008	0.988	0.832	0.856	0.984	0.842	6H
2009	1.860	0.976	0.794	0.661	0.525	3,4H
2010	2.852	1.240	0.819	0.531	0.435	3n,3H
2011	3.098	1.600	0.865	0.597	0.516	6H
Averages						
91-10	2.421	1.848	0.892	0.859	0.769	
01-10	2.160	1.633	0.877	0.868	0.767	

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989–2011.

Numbers for eggs and fry are millions.

	Egg Take			Fry	Percent	Survival		Thermal Mark	Last Date
Brood Year	Target	Collected [a]	Transport	Planted	Fertilized	Fertilized Egg to Fry	Green Egg to Fry	Pattern(s)	Released
1990	2.500	0.985	0.673	0.673	0.775	0.684	0.683	1:1.3	22-Jun
1991	1.500	1.360	1.232	1.232	0.927	0.906	0.906	2:1.4	26-Jun
1992	1.750	1.486	0.909	0.909	0.858	0.612	0.612	1:1.5	14-Jul
1993	2.500	1.144	0.521	0.521	0.619	0.455	0.455	2:1.5	14-Jul
1994	2.500	1.229	0.898	0.898	0.801	0.731	0.730	1:1.5	21-Jul
1995	2.500	2.407	1.724	1.724	0.843	0.716	0.716	1:1.5	25-Jun
1996	5.000	4.934	3.941	3.941	0.849	0.800	0.799	1:1.5&1:1.5,2.3	27-Jun
1997	5.000	4.651	3.597	3.597	0.910	0.773	0.773	2:1&2:1.5,2.3	9-Jul
1998	2.500	2.414	1.769	1.769	0.897	0.733	0.733	1:1.4+2.5&1:1.4+2.3	30-Jun
1999	2.500	0.461	0.350	0.350	0.922	0.742	0.760	2:1.5	4-Jul
2000	3.000	2.816	2.320	2.320	0.943	0.902	0.824	1.1.5+2.3&1.1.5	26-Jun
2001	4.800	4.364	2.233	2.233	0.900	0.638	0.512	2:1.5&2:1.5,2.3	25-Jun
2002	3.000	2.498	1.353	0.911	0.823	0.588	0.365	1:1.4&1:1.4+2.3	27-May
2003	5.000	2.642	2.141	2.141	0.919	0.873	0.810	1.1.5+2.3&1.1.5	27-May
2004	5.000	0.750	0.628	0.628	0.933	0.837	0.837	1:1.4+2.5n&1:1.4+2.3,3.3	20-May
2005	5.000	1.811	1.471	1.471	0.936	0.813	0.813	1:1.4+2.3&1:1.4+2.5	8-Jun
2006	5.000	4.810	3.705	3.705	0.920	0.770	0.770	1:1.2,2.1,3.2&1:1.2,2.2,3.3&1:1.2,2.2,3.1	13-Jun
2007	5.000	3.673	2.522	2.122	0.885	0.687	0.578	2n3&2,3n,1&1,3n,2&3,2n,1	6-Jun
2008	5.000	4.902	3.874	3.871	0.892	0.900	0.790	3,2H & 3,3H	3-Jun
2009	5.000	1.224	0.717	0.716	0.852	0.586	0.585	6,2H & 3n,2H	22-May
2010	2.000	1.896	1.599	1.599	0.919	0.842	0.843	2,1,2H & 2,2,3H	29-May
2011	2.000	2.190	1.893	1.893	0.912	0.864	0.864	3n,5H&6,2H	29-May
Averages									
90-10	3.621	2.498	1.818	1.778	0.873	0.742	0.709		18-Jun
01-11	4.480	2.857	2.024	1.940	0.898	0.753	0.690		2-Jun

Multiple Release Treatments

	Treatment 1				Treatment 2			
Brood Year	Mark	Treatment	Number Released	Last Date Released	Mark	Treatment	Number Released	Last Date Released
1996	1:1.5	onshore	3.441	27-Jun	1:1.5,2.3	onshore	0.500	27-Jun
1997	2:1.5	onshore	3.202	29-Jun	2:1.5,2.3	fed at lake	0.394	9-Jul
1998	1:1.4+2.5	unfed	0.751	9-Jun	1:1.4+2.3	fed at lake	1.018	30-Jun
1999	2:1.5	fed at lake	0.350	4-Jul				
2000	1.1.5+2.3	fed early	1.265	15-Jun	1.1.5	fed late	1.054	26-Jun
2001	2:1.5	unfed early	0.727	30-May	2:1.5,2.3	fed	1.432	25-Jun
2002	1:1.4	direct release early	0.911	27-May	1:1.4+2.3	fed - IHN loss	0.000	none
2003	1.1.5+2.3	unfed early south	1.005	27-May	1.1.5	unfed early north	1.136	24-May
2004	1:1.4+2.5N	unfed early south	0.367	20-May	1:1.4+2/3,3.3	unfed early north	0.261	20-May
2005	1:1.4+2.3	unfed early south	0.775	8-Jun	1:1.4+2.5	unfed early north	0.696	8-Jun
2006	1:1.2,2.1,3.2	unfed early south	1.808	7-Jun	1:1.2,2.2,3.3	1:1.2,2.2,3.1 early north	1.897	13-Jun
2007	1,3n,2	unfed early midlake	0.971	6-Jun	2n3	2,3n1 early north	1.150	5-Jun
2007	3,2n,1	extended rearing[c]	0.400	8-Jun				
2008	3,2H	unfed early north	0.115	3-Jun	3,3H	extended rearing	0.115	26-Jul
2009	6,2H	unfed early north	0.506	22-May	3n,2H	extended rearing	0.210	12-Aug
2010	2,1,2H	unfed early north	1.398	29-May	2,2,3H	extended rearing	0.198	14-Aug
2011	3n,5H	unfed early north	1.649	29-May	6,2H	extended rearing	0.242	21-Aug
Averages								
96-10			1.125	7-Jun			0.719	27-Jun
01-10			0.817	31-May			0.710	26-Jun

[a] Eggs not transported but placed in inlake incubator; 2000 = 244,000, 2001 = 865,000, 2002 196,000, 2003 = 190,000.

[b] Survival rates are for hatchery eggs and hatchery fry plants and do not inlcude the lake incubators.

[c] All died to IHNV

Appendix F. 4. Trapper Lake egg collection, fry plants, and survivals, 1990–2011.

Numbers for eggs and fry are millions.

	Egg Take			Fry	Percent	Survival		Thermal	Last
Brood Year	Target	Collected	Transport	Planted	Fertilized	Fertilized Egg to Fry	Green Egg to Fry	Mark Pattern	Date Released
1990	2.500	2.314	0.934	0.934			0.404	5H	22-Jun
1991	2.500	2.953	1.811	1.811			0.613	6H	11-Jun
1992	2.500	2.521	1.113	1.113			0.442	7H3	22-Jun
1993		1.174	0.916	0.916			0.781	5H5n	24-Jun
1994		1.117	0.773	0.773			0.692	7H	3-Jul
—									
2006	1.000	1.109	0.897	0.897	0.897	0.905	0.808	6H	20-Jun
2007	1.000	0.900	0.353	0.353	0.604	0.650	0.393	4,2nH	5-Jun

Appendix G. 1. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2005	254	Mean	0.310	0.068	0.577	0.033	0.012
		SD	0.051	0.022	0.055	0.015	0.007
		CI05	0.227	0.035	0.486	0.011	0.003
		CI95	0.396	0.107	0.666	0.060	0.025
2006	350	Mean	0.286	0.308	0.357	0.044	0.006
		SD	0.042	0.034	0.046	0.017	0.004
		CI05	0.217	0.254	0.281	0.018	0.001
		CI95	0.357	0.365	0.432	0.074	0.015
2007	292	Mean	0.187	0.463	0.302	0.041	0.007
		SD	0.037	0.036	0.042	0.014	0.006
		CI05	0.129	0.404	0.234	0.020	0.001
		CI95	0.249	0.522	0.373	0.066	0.019
2008	293	Mean	0.211	0.522	0.175	0.082	0.009
		SD	0.033	0.035	0.036	0.020	0.007
		CI05	0.158	0.464	0.120	0.051	0.001
		CI95	0.266	0.580	0.238	0.118	0.022
2009	177	Mean	0.014	0.738	0.114	0.126	0.008
		SD	0.020	0.040	0.033	0.029	0.007
		CI05	0.000	0.671	0.063	0.082	0.000
		CI95	0.057	0.801	0.171	0.176	0.022
2010	72	Mean	0.093	0.648	0.122	0.110	0.028
		SD	0.050	0.070	0.065	0.043	0.022
		CI05	0.020	0.531	0.026	0.047	0.002
		CI95	0.182	0.760	0.237	0.187	0.070
2011	70	Mean	0.202	0.529	0.144	0.056	0.069
		SD	0.064	0.071	0.059	0.035	0.032
		CI05	0.101	0.411	0.060	0.010	0.024
		CI95	0.311	0.644	0.251	0.123	0.129

Appendix G. 2. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	103	717	135	122	31
		SD	55	77	72	48	24
		CI05	22	587	28	52	2
		CI95	202	842	263	207	78
2011	70	Estimate	566	1,480	404	158	192
		SD	180	198	165	99	91
		CI05	283	1,152	167	27	67
		CI95	870	1,803	702	344	361

Appendix G. 3. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2005	226	Mean	0.220	0.134	0.518	0.082	0.045
		SD	0.052	0.032	0.059	0.025	0.015
		CI05	0.136	0.084	0.421	0.043	0.024
		CI95	0.308	0.190	0.615	0.125	0.072
2006	201	Mean	0.156	0.177	0.561	0.086	0.019
		SD	0.043	0.038	0.055	0.028	0.011
		CI05	0.089	0.118	0.471	0.045	0.005
		CI95	0.230	0.241	0.651	0.135	0.041
2007	200	Mean	0.221	0.296	0.383	0.053	0.048
		SD	0.047	0.040	0.054	0.021	0.017
		CI05	0.145	0.232	0.295	0.023	0.024
		CI95	0.301	0.362	0.473	0.090	0.079
2008	200	Mean	0.284	0.251	0.330	0.089	0.046
		SD	0.048	0.039	0.055	0.029	0.015
		CI05	0.206	0.189	0.242	0.047	0.024
		CI95	0.365	0.316	0.422	0.142	0.074
2009	190	Mean	0.321	0.166	0.195	0.094	0.222
		SD	0.047	0.033	0.046	0.035	0.035
		CI05	0.245	0.114	0.122	0.048	0.166
		CI95	0.400	0.224	0.275	0.164	0.280
2010	201	Mean	0.206	0.257	0.340	0.116	0.080
		SD	0.044	0.038	0.053	0.030	0.020
		CI05	0.136	0.197	0.254	0.070	0.050
		CI95	0.281	0.321	0.429	0.168	0.115
2011	199	Mean	0.237	0.099	0.272	0.133	0.259
		SD	0.047	0.028	0.061	0.037	0.037
		CI05	0.162	0.055	0.176	0.075	0.201
		CI95	0.317	0.148	0.377	0.197	0.322

Appendix G. 4. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	221	275	364	125	86
		SD	47	41	57	32	21
		CI05	146	211	272	76	54
		CI95	301	344	460	180	124
2011	70	Estimate	303	126	348	170	331
		SD	60	36	78	48	47
		CI05	207	71	225	96	257
		CI95	405	189	482	252	412

Appendix G. 5. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2005	247	Mean	0.914	0.073	0.005	0.000	0.008
		SD	0.023	0.020	0.011	0.001	0.006
		CI05	0.874	0.043	0.000	0.000	0.001
		CI95	0.947	0.109	0.028	0.000	0.020
2006	209	Mean	0.878	0.085	0.027	0.010	0.000
		SD	0.026	0.023	0.015	0.008	0.002
		CI05	0.833	0.051	0.005	0.001	0.000
		CI95	0.918	0.125	0.055	0.025	0.002
2007	96	Mean	0.491	0.490	0.001	0.015	0.003
		SD	0.054	0.054	0.007	0.015	0.007
		CI05	0.402	0.402	0.000	0.000	0.000
		CI95	0.580	0.579	0.005	0.045	0.016
2008	104	Mean	0.482	0.360	0.001	0.071	0.086
		SD	0.053	0.051	0.007	0.028	0.028
		CI05	0.395	0.278	0.000	0.030	0.046
		CI95	0.569	0.446	0.001	0.121	0.136
2009	257	Mean	0.809	0.185	0.004	0.001	0.001
		SD	0.031	0.027	0.015	0.006	0.003
		CI05	0.755	0.143	0.000	0.000	0.000
		CI95	0.854	0.231	0.034	0.011	0.005
2010	152	Mean	0.537	0.448	0.002	0.000	0.013
		SD	0.043	0.042	0.008	0.001	0.009
		CI05	0.466	0.378	0.000	0.000	0.002
		CI95	0.607	0.518	0.011	0.000	0.031
2011	70	Mean	0.808	0.162	0.001	0.001	0.028
		SD	0.052	0.049	0.007	0.004	0.020
		CI05	0.717	0.089	0.000	0.000	0.005
		CI95	0.887	0.249	0.003	0.001	0.066

Appendix G. 6. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	524	436	2	0	13
		SD	42	41	7	1	9
		CI05	454	369	0	0	2
		CI95	592	505	11	0	31
2011	70	Estimate	518	104	1	0	18
		SD	33	31	4	3	13
		CI05	459	57	0	0	3
		CI95	568	160	2	1	43

Appendix G. 7. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 sport fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2005	264	Mean	0.563	0.376	0.015	0.028	0.018
		SD	0.041	0.034	0.029	0.016	0.009
		CI05	0.491	0.320	0.000	0.009	0.006
		CI95	0.626	0.433	0.081	0.059	0.035
2006	269	Mean	0.600	0.312	0.052	0.008	0.027
		SD	0.036	0.031	0.022	0.008	0.010
		CI05	0.540	0.262	0.020	0.000	0.013
		CI95	0.659	0.365	0.092	0.025	0.045
2007	237	Mean	0.424	0.523	0.027	0.000	0.025
		SD	0.043	0.035	0.032	0.003	0.011
		CI05	0.352	0.466	0.000	0.000	0.010
		CI95	0.493	0.581	0.089	0.000	0.044
2008	218	Mean	0.224	0.763	0.002	0.000	0.010
		SD	0.031	0.032	0.006	0.001	0.007
		CI05	0.174	0.709	0.000	0.000	0.002
		CI95	0.278	0.814	0.016	0.000	0.024
2009	239	Mean	0.254	0.726	0.001	0.000	0.018
		SD	0.031	0.031	0.006	0.001	0.009
		CI05	0.205	0.674	0.000	0.000	0.006
		CI95	0.306	0.776	0.002	0.000	0.035
2010	200	Mean	0.453	0.501	0.001	0.000	0.045
		SD	0.038	0.038	0.004	0.001	0.015
		CI05	0.390	0.439	0.000	0.000	0.024
		CI95	0.515	0.564	0.000	0.000	0.072
2011	200	Mean	0.435	0.500	0.019	0.019	0.027
		SD	0.046	0.040	0.030	0.013	0.014
		CI05	0.358	0.435	0.000	0.000	0.008
		CI95	0.509	0.566	0.082	0.043	0.053

Appendix G. 8. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 sport fishery, 2011.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
Year	Sample Size	Statistic	Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	983	1,089	1	0	99
		SD	83	83	8	2	32
		CI05	848	953	0	0	52
		CI95	1,120	1,225	1	0	157
2011	70	Estimate	549	631	24	23	34
		SD	58	50	38	17	17
		CI05	452	548	0	0	10
		CI95	642	713	103	55	67